

NSPS 0000a Annual Report

Oxy Permian Resources New Mexico Delaware Basin

Initial Reporting Period: 9/19/2015 – 8/2/2017



OXY USA Inc.

5 Greenway Plaza, Suite 110, Houston, Texas 77046-0521

P.O. Box 27570, Houston, Texas 77227-7570

Telephone 713.215.7000



OXY USA Inc.

A subsidiary of Occidental Petroleum Corporation

5 Greenway Plaza, Suite 110, Houston, Texas 77046-

0521

P.O. Box 27570, Houston, Texas 77227-7570

Telephone 713 215 7000

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COMPLIANCE ASSURANCE
& ENFORCEMENT DIV.

October 30, 2017

Director; Air, Pesticides, and Toxics Division
1445 Ross Avenue
Dallas, TX 75202

Re: ***Annual Report for NSPS 0000a***

To whom it may concern,

On behalf of Oxy USA Inc. enclosed is the 2015 – 2017 Initial NSPS 0000a Annual Report for the Permian Resources business unit pursuant to 40 C.F.R. 60.5420a(b).

If you have any questions or concerns, please contact me at 713-215-7299.

Sincerely yours,

Nathan Byrd
Environmental Specialist
OXY USA Inc.

Enclosure

NSPS 0000a Annual Report

Pursuant to 40 C.F.R. § 60.5420a(b)

Company Information

Company Name: OXY USA Inc.

Company Mailing Address:	5 Greenway Plaza	Houston	TX	77046
	Street Address	City	State	Zip Code

For information regarding this report please contact the following:

Contact Name:	Nathan Byrd
Contact Phone Number:	(713) 215-7299
Contact Email Address:	nathan_byrd@oxy.com

Reporting Period

Compliance Period

Start Date: 09/19/2015

End Date: 08/02/2017

Date Report Submitted: 10/31/2017

Certification By Responsible Officials

Statement of Certification: Based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate and complete.

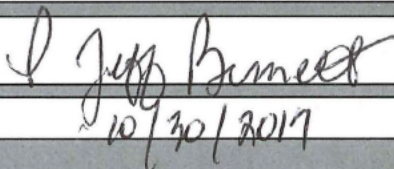
Name of Certifying Official: Jeff Bennett

Title of Certifying Official: President and General Manager of Permian Resources - New Mexico Delaware Basin

Email Address: Jeff.Bennett@oxy.com

Phone Number: (713) 366-5221

Signature:



Signature Date:

10/30/2017

Table 1: Facility Summary

Site Name	Latitude	Longitude	Affected Facility Type(s)						
			Well	Centrifugal Compressor	Reciprocating Compressor	Pneumatics	Storage Vessel(s)	Fugitives	
AMOCO 21 FEDERAL 001H	(b) (9)		1						
AMOCO CTB BATTERY								X	
ARTESIA YESO CTB BATTERY								X	
ARTESIA YESO FEDERAL UNIT 15			1						
ARTESIA YESO FEDERAL UNIT 22			1						
ARTESIA YESO FEDERAL UNIT 27Y			1						
CEDAR CANYON 15 003H			1						
CEDAR CANYON 16 STATE 009H			1						
CEDAR CANYON 16 STATE 033H			1						
CEDAR CANYON 16 STATE 034H			1						
Cedar Canyon 16-1 Single Well Battery									X
CEDAR CANYON 21 FEDERAL 005H			1						
CEDAR CANYON 21 FEDERAL 005H			1						
Cedar Canyon 21 Federal 1 Ctb Battery									X
CEDAR CANYON 22 001H			1						
CEDAR CANYON 22 15 FED COM 034H			1						
CEDAR CANYON 22 15 FEE 031H			1						
CEDAR CANYON 22 15 FEE 032H			1						
CEDAR CANYON 22 15 FEE 033H			1						
CEDAR CANYON 22 CENTRAL SATELLITE									X
Cedar Canyon 22 CTB									X
CEDAR CANYON 22 FED COM 006Y			1						
CEDAR CANYON 22 FED COM 006Y			1						
CEDAR CANYON 22 FEDERAL 005H			1						
CEDAR CANYON 22 FEDERAL 21H			1						
CEDAR CANYON 22 FEDERAL COM 004H			1						
CEDAR CANYON 23 002H			1						
CEDAR CANYON 23 FEDERAL 003H			1						
CEDAR CANYON 23 FEDERAL 004H			1						
CEDAR CANYON 23 FEDERAL 005H			1						
CEDAR CANYON 23 FEDERAL COM 033H			1						
CEDAR CANYON 23-2 CTB BATTERY									X
CEDAR CANYON 27 FEDERAL 005H			1						
CEDAR CANYON 27 FEDERAL 006H			1						

CEDAR CANYON 27 FEDERAL 007H						1	
CEDAR CANYON 27 STATE COM 010H						1	
CEDAR CANYON 27 STATE COM 010H						1	
CEDAR CANYON 28 27 FEDERAL COM 005H						1	
CEDAR CANYON 28 CTB BATTERY							X
CEDAR CANYON 28 FEDERAL 006H						1	
CEDAR CANYON 28 FEDERAL 007H						1	
CEDAR CANYON 28 FEDERAL 008H						1	
CEDAR CANYON 28 FEDERAL 009H						1	
Cedar Canyon 28 Federal 4 Swd Battery							X
CEDAR CANYON 29 FEDERAL 002H						1	
CEDAR CANYON 29 FEDERAL 003H						1	
CEDAR CANYON 29 FEDERAL 21H						1	
Cedar Canyon CPD CTB					1		
Christopher Federal 2 Ctb Battery							X
COPPERHEAD 18 STATE 001						1	
COPPERHEAD 18 STATE 001						1	
COPPERHEAD 18 STATE AND SWD							X
COVINGTON A FEDERAL 001						1	
CYPRESS 33 FED COM 8H						1	
CYPRESS 33 FEDERAL 9H						1	
CYPRESS 33 FEDERAL COM 010H						1	
CYPRESS 34 FEDERAL 1 CTB BATTERY							X
CYPRESS 34 FEDERAL 10H						1	
CYPRESS 34 FEDERAL 12H						1	
CYPRESS 34 FEDERAL 8H						1	
CYPRESS 34 FEDERAL 9H						1	
DERO FEDERAL COM 2						1	
Dwu Federal 6 Single Well Battery							X
Elizondo A4 Battery							X
ELIZONDO FEDERAL A 4						1	
Foxglove Fed 2906H							X
Goodnight 35 Federal 2H Well Battery							X
GOVERNMENT AG 01 SINGLE WELL BATTERY							X
Harroun 15 8 And 15 Cib Battery							X
LEAH 31 FED 001						1	
MCHAM 34 STATE 004						1	
MISTY FEDERAL COM 35-3H						1	
Misty Ivore Ctb (35 Federal 4H Battery)							X
PATTON 18 FEDERAL 008H						1	
Patton 18 Federal 1 Ctb Battery							X
PATTON MDP1 18 FEDERAL 6H						1	

(b) (9)

Peaches 19 1 CTB				1	5	
PEACHES 19 CTB BATTERY						X
PEACHES 19 FEDERAL 001H	1					
PIGLET CENTRAL TANK BATTERY						X
Red Tank 23 Federal 1 Ctb Battery						X
SMOKEY BITS STATE COM 003H	1					
SMOKEY BITS STATE COM 006H	1					
SMOKEY BITS STATE COM CTB						X
STATE DW 6	1					
State Dw Battery						X
Sterling Silver 33 3 Federal Ctb Central Battery						X
STERLING SILVER 33 FEDERAL 001H	1					
SUNRISE 8 003	1					
Sunrise 8 Federal 3 Ctb Battery						X

Table 2: Wells

API Well Number	Well Name	Latitude	Longitude	Date start of flowback	Time start of flowback	Date to separator	Time to separator	Date returning to initial flowback	Time returning to initial flowback	Date startup of production	Time startup of production	Duration of flowback (days)	Duration of recovery (hrs)	Disposition of recovery	Duration of combustion (hrs)	Duration of venting (hrs)	Reason for venting	Technical infeasibility reasoning
3002540753	AMOCO 21 FEDERAL 001H	(b) (9)		12/13/2016	11:08	01/02/2017	6:00	N/A	N/A	01/03/2017	10:05	21	28	Flared	28	0	N/A	N/A
3001541329	ARTESIA YESO FEDERAL UNIT 15			04/20/2016	0:00	04/24/2016	23:00	N/A	N/A	04/27/2016	23:00	7	63	Flared	63	0	N/A	N/A
3001541328	ARTESIA YESO FEDERAL UNIT 22			08/13/2016	17:00	08/14/2016	7:00	N/A	N/A	08/23/2016	6:00	10	96	Flared and/or sent to sales	79	0	N/A	N/A
3001542378	ARTESIA YESO FEDERAL UNIT 27Y			06/16/2017	15:00	06/17/2017	13:00	06/17/2017	15:00	06/20/2017	6:00	4	78	Data not available	Data not available	0	N/A	N/A
3001541594	CEDAR CANYON 15 003H			07/23/2016	10:30	07/23/2016	11:00	N/A	N/A	07/27/2016	10:00	4	94	Flared	94	0	N/A	N/A
3001542061	CEDAR CANYON 16 STATE 009H			10/18/2016	8:00	10/21/2016	10:20	N/A	N/A	10/26/2016	10:00	8	106	Flared	106	0	N/A	N/A
3001543844	CEDAR CANYON 16 STATE 033H			12/07/2016	17:00	12/12/2016	0:00	N/A	N/A	02/01/2017	15:00	56	1239	Flared and/or sent to sales	391	0	N/A	N/A
3001543843	CEDAR CANYON 16 STATE 034H			12/08/2016	0:00	12/10/2016	10:00	N/A	N/A	02/01/2017	15:00	55	1277	Flared and/or sent to sales	293	0	N/A	N/A
3001543749	CEDAR CANYON 21 FEDERAL 005H			11/26/2016	6:40	11/27/2016	9:00	N/A	N/A	12/25/2016	14:00	29	665	Flared and/or sent to sales	76	0	N/A	N/A
3001543749	CEDAR CANYON 21 FEDERAL 005H			01/08/2017	11:20	01/10/2017	14:00	N/A	N/A	01/21/2017	7:00	13	258	Flared and/or sent to sales	4	0	N/A	N/A
3001540668	CEDAR CANYON 22 001H			10/22/2016	15:30	10/23/2016	12:00	N/A	N/A	11/04/2016	14:00	13	277	Flared	277	0	N/A	N/A
3001544055	CEDAR CANYON 22 15 FED COM 034H			05/23/2017	16:30	05/24/2017	17:00	N/A	N/A	07/11/2017	12:00	49	1141	Flared and/or sent to sales	163	0	N/A	N/A
3001543809	CEDAR CANYON 22 15 FEE 031H			08/30/2016	9:30	09/03/2016	19:00	N/A	N/A	10/20/2016	6:00	51	1046	Flared and/or sent to sales	191	0	N/A	N/A
3001543808	CEDAR CANYON 22 15 FEE 032H			08/30/2016	22:00	09/09/2016	12:00	N/A	N/A	10/20/2016	6:00	51	979	Flared and/or sent to sales	114	0	N/A	N/A
3001543915	CEDAR CANYON 22 15 FEE 033H			05/23/2017	16:00	05/23/2017	17:00	N/A	N/A	06/29/2017	6:00	37	878	Flared and/or sent to sales	187	0	N/A	N/A
3001543906	CEDAR CANYON 22 FED COM 006Y			11/26/2016	6:30	11/29/2016	17:00	N/A	N/A	12/18/2016	17:00	22	459	Flared and/or sent to sales	69	0	N/A	N/A
3001543906	CEDAR CANYON 22 FED COM 006Y			12/26/2016	12:45	12/26/2016	14:00	N/A	N/A	01/21/2017	7:00	26	496	Flared and/or sent to sales	72	0	N/A	N/A
3001543758	CEDAR CANYON 22 FEDERAL 005H			11/25/2016	6:50	11/27/2016	13:00	N/A	N/A	01/27/2017	7:00	63	934	Flared and/or sent to sales	108	0	N/A	N/A
3001543642	CEDAR CANYON 22 FEDERAL 21H			01/28/2017	17:30	01/29/2017	15:00	N/A	N/A	03/17/2017	7:00	48	1121	Flared and/or sent to sales	312	0	N/A	N/A
3001543708	CEDAR CANYON 22 FEDERAL COM 004H			01/28/2017	17:30	01/29/2017	15:00	N/A	N/A	03/17/2017	7:00	48	1121	Flared and/or sent to sales	263	0	N/A	N/A
3001541194	CEDAR CANYON 23 002H			08/26/2016	18:00	08/26/2016	19:00	N/A	N/A	09/04/2016	19:00	9	216	Flared	216	0	N/A	N/A
3001543290	CEDAR CANYON 23 FEDERAL 003H			01/28/2017	17:30	01/30/2017	10:00	N/A	N/A	03/17/2017	7:00	48	1102	Flared and/or sent to sales	410	0	N/A	N/A
3001543281	CEDAR CANYON 23 FEDERAL 004H			01/16/2016	17:00	01/19/2016	8:30	N/A	N/A	02/11/2016	14:30	26	524	Flared	524	0	N/A	N/A
3001543282	CEDAR CANYON 23 FEDERAL 005H			01/16/2016	17:00	01/19/2016	8:30	N/A	N/A	02/10/2016	15:00	25	516	Flared	516	0	N/A	N/A
3001544074	CEDAR CANYON 23 FEDERAL COM 033H			08/03/2017	12:15	08/07/2017	21:00	N/A	N/A	09/05/2017	10:00	33	385	Flared and/or sent to sales	17	0	N/A	N/A
3001543775	CEDAR CANYON 27 FEDERAL 005H			07/29/2016	18:00	07/30/2016	9:00	N/A	N/A	08/25/2016	18:00	27	634	Flared and/or sent to sales	413	0	N/A	N/A
3001543232	CEDAR CANYON 27 FEDERAL 006H			12/16/2015	16:00	12/19/2015	9:30	N/A	N/A	01/12/2016	8:00	27	380	Flared	380	0	N/A	N/A
3001543233	CEDAR CANYON 27 FEDERAL 007H			01/12/2016	19:00	01/13/2016	7:00	N/A	N/A	02/12/2016	7:00	31	672	Flared	672	0	N/A	N/A
3001543673	CEDAR CANYON 27 STATE COM 010H			07/29/2016	18:00	07/31/2016	9am	N/A	N/A	08/18/2016	6:00	20	430	Flared and/or sent to sales	389	0	N/A	N/A
3001543673	CEDAR CANYON 27 STATE COM 010H			07/29/2016	18:00	07/31/2016	9:00	N/A	N/A	08/25/2016	10:00	27	610	Flared and/or sent to sales	389	0	N/A	N/A
3001543645	CEDAR CANYON 28 27 FEDERAL COM 005H			04/13/2017	10:05	04/13/2017	15:00	N/A	N/A	05/15/2017	14:00	32	827	Flared and/or sent to sales	228	0	N/A	N/A
3001543234	CEDAR CANYON 28 FEDERAL 006H			12/16/2015	16:00	12/19/2015	13:15	N/A	N/A	01/12/2016	8:00	27	437	Flared	388	49	Data not available	Data not available
3001543238	CEDAR CANYON 28 FEDERAL 007H			01/12/2016	17:00	01/13/2016	19:00	N/A	N/A	12/12/2016	6:00	335	679	Flared	679	0	N/A	N/A
3001543819	CEDAR CANYON 28 FEDERAL 008H			01/02/2017	14:30	01/08/2017	14:00	N/A	N/A	02/03/2017	12:00	32	662	Flared and/or sent to sales	269	0	N/A	N/A
3001544016	CEDAR CANYON 28 FEDERAL 009H			04/13/2017	10:20	04/16/2017	8:00	N/A	N/A	05/04/2017	12:00	21	435	Flared and/or sent to sales	103	0	N/A	N/A
3001542992	CEDAR CANYON 29 FEDERAL 002H			01/02/2017	16:00	01/07/2017	14:00	N/A	N/A	01/20/2017	12:00	18	308	Flared	308	0	N/A	N/A
3001542993	CEDAR CANYON 29 FEDERAL 003H			04/13/2017	10:00	04/16/2017	7:00	N/A	N/A	04/21/2017	9:00	8	149	Flared and/or sent to sales	130	0	N/A	N/A
3001543601	CEDAR CANYON 29 FEDERAL 21H			04/13/2017	10:15	04/14/2017	12:00	N/A	N/A	05/15/2017	14:00	32	786	Flared and/or sent to sales	155	0	N/A	N/A
3002536489	COPPERHEAD 18 STATE 001			08/24/2016	20:30	08/25/2016	6:15	N/A	N/A	08/31/2016	10:15	6	147	Flared	147	0	N/A	N/A
3002536489	COPPERHEAD 18 STATE 001			09/16/2016	14:30	09/18/2016	9:30	N/A	N/A	09/30/2016	10:00	14	118	Flared	118	0	N/A	N/A
3002524947	COVINGTON A FEDERAL 001			06/14/2017	21:00	N/A	N/A	N/A	N/A	06/20/2017	5:00	6	0	N/A	N/A	0	N/A	N/A
3001543075	CYPRESS 33 FED COM 8H			02/25/2016	13:00	02/26/2016	15:30	N/A	N/A	03/28/2016	14:00	32	553	Flared and/or sent to sales	156	0	N/A	N/A
3001543751	CYPRESS 33 FEDERAL 9H			06/23/2016	15:00	07/02/2016	11:00	N/A	N/A	07/15/2016	21:00	22	319	Flared and/or sent to sales	99	0	N/A	N/A
3001544096	CYPRESS 33 FEDERAL COM 010H			05/26/2017	12:45	05/28/2017	21:00	N/A	N/A	07/13/2017	6:00	48	1080	Flared and/or sent to sales	129	0	N/A	N/A
3001543076	CYPRESS 34 FEDERAL 10H			09/21/2015	16:45	Data not available	Data not available	Data not available	Data not available	10/07/2015	5:00	16	Data not available	Data not available	Data not available	Data not available	Data not available	Data not available
3001543849	CYPRESS 34 FEDERAL 12H			12/22/2016	12:00	12/27/2016	18:00	N/A	N/A	01/24/2017	9:00	33	613	Flared and/or sent to sales	162	0	N/A	N/A
3001539430	CYPRESS 34 FEDERAL 8H			12/10/2016	10:00	12/21/2016	9:00	N/A	N/A	12/23/2016	11:00	13	49	Flared	49	0	N/A	N/A
3001542088	CYPRESS 34 FEDERAL 9H			08/31/2016	20:00	09/03/2016	10:00	N/A	N/A	09/07/2016	6:00	7	50	Flared	50	0	N/A	N/A
3001520973	DERO FEDERAL COM 2			01/01/2017	8:00	01/04/2017	7:45	N/A	N/A	01/25/2017	23:00	24	249	Flared and/or sent to sales	47	0	N/A	N/A
3001521931	ELIZONDO FEDERAL A 4			01/13/2016	22:00	01/14/2017	0:00	N/A	N/A	03/24/2016	6:00	71	35	Flared and/or sent to sales	22	0	N/A	N/A
3001527624	LEAH 31 FED 001			08/04/2016	18:00	08/04/2016	18:00	N/A	N/A	08/23/2016	6:00	19	435	Flared	435	0	N/A	N/A
3001541233	MCHAM 34 STATE 004			08/23/2016	19:00	08/23/2016	19:00	N/A	N/A	08/25/2016	12:00	2	40	Flared	40	0	N/A	N/A
3001541416	MISTY FEDERAL COM 35-3H			01/13/2016	18:30	01/13/2016	19:15	N/A	N/A	01/18/2016	9:00	5	138	Flared and/or sent to sales	68	0	N/A	N/A
3001541343	PATTON 18 FEDERAL 008H			01/13/2017	15:45	01/14/2017	0:00	N/A	N/A	01/25/2017	12:00	12	273	Flared	273	0	N/A	N/A
3001543854	PATTON MDP1 18 FEDERAL 6H			11/20/2016	13:00	11/24/2016	13:00	N/A	N/A	01/05/2017	16:00	46	1010	Flared and/or sent to sales	236	0	N/A	N/A
3001540250	PEACHES 19 FEDERAL 001H			01/21/2016	19:00	11/23/2016	16:00	N/A	N/A	02/02/2016	11:00	12	236	Flared	236	0	N/A	N/A
3001539118	SMOKEY BITS STATE COM 003H			09/09/2016	22:00	09/13/2016	13:00	N/A	N/A	09/13/2016	18:00	4	3	Flared	3	0	N/A	N/A
3001540148	SMOKEY BITS STATE COM 006H			09/13/2016	19:00	Data not available	Data not available	Data not available	Data not available	09/14/2016	6:00	1	Data not available	Data not available	Data not available	Data not available	Data not available	Data not available
3002528838	STATE DW 6			12/19/2016	18:00	12/19/2016	19:00	N/A	N/A	12/25/2016	6:00	6	139	Flared	139	0	N/A	N/A
3001539831	STERLING SILVER 33 FEDERAL 001H			11/19/2016	16:00	11/21/2016	22:00	N/A	N/A	11/28/2016	10:00	9	106	Flared	106	0	N/A	N/A
3001534900	SUNRISE 8 003			04/22/2016	14:00	04/26/2016	10:00	N/A	N/A	05/05/2016	0:00	13	204	Flared	204	0	N/A	N/A

Table 3: Reciprocating Compressors

Site Name	Facility ID	Latitude	Longitude	Startup/ Compliance Date	Time Since Startup or Last Rod Packing Replacement (months or hours of operation)	Deviations To Report? (If Deviations Occurred Put an 'X'. If not leave blank)
Cedar Canyon CPD CTB	30015CP2058	(b) (9)		6/28/2016	16 months	
Peaches 19 1 CTB	30015CP2055			5/9/2016	17 months	

Table 4: Storage Vessels

Site Name	Facility ID	Latitude	Longitude	Const./Mod. Date	VOC PTE Uncontrolled (tpy)	VOC PTE Controlled (tpy)	Meets requirements in §60.5410a(h)(2) and (3)?	Professional Engineer Certification	Records specified in §60.5420a(c)(5)(vi)	Deviations To Report? <i>(If Deviations Occurred Put an 'X'. If not leave blank)</i>
Peaches 19-1 Battery	TANK 4	(b) (9)		02/25/2016	90.4	1.8	Yes	Attached	Attached	
Peaches 19-1 Battery	TANK 5			02/25/2016	90.4	1.8	Yes	Attached	Attached	
Peaches 19-1 Battery	TANK 6			02/25/2016	90.4	1.8	Yes	Attached	Attached	
Peaches 19-1 Battery	TANK 7			02/25/2016	90.4	1.8	Yes	Attached	Attached	
Peaches 19-1 Battery	TANK 8			02/25/2016	90.4	1.8	Yes	Attached	Attached	

Semiannual Survey	Site Name	Latitude	Longitude	(i) Date of the survey	(ii) Survey start time	(iii) Survey end time	(iii) Name of operator(s) performing survey	(iii) Operator training and experience	(iv) Ambient temperature (°F)	(iv) Sky conditions	(iv) Maximum wind speed (mph)	(v) Monitoring instrument used	(vi) Any deviations from the monitoring plan	(vii) Number of components for which fugitive emissions were detected	(vii) Type of component for which fugitive emissions were detected	(viii) Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h)	(ix) Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored	(x) The date of the successful repair of the fugitive emissions component	(xi) Number and type of fugitive emissions components placed on delay of repair	(xi) Explanation for each delay of repair	(xii) Type of instrument used to resurvey a repaired fugitive emissions component
Initial Survey	AMOCO CTB BATTERY	(b) (9)		2/21/2017	7:35:00 AM	8:16:00 AM	(b) (6)	Expert (> 300 hours)	53	Clear / Sunny	1	FLIR GF320	None	5	Scrubber vent line compressor	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	AMOCO CTB BATTERY			2/21/2017	7:35:00 AM	8:16:00 AM		Expert (> 300 hours)	53	Clear / Sunny	1	FLIR GF320	None	5	Thief Hatch	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	AMOCO CTB BATTERY			2/21/2017	7:35:00 AM	8:16:00 AM		Expert (> 300 hours)	53	Clear / Sunny	1	FLIR GF320	None	5	Thief Hatch	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	AMOCO CTB BATTERY			2/21/2017	7:35:00 AM	8:16:00 AM		Expert (> 300 hours)	53	Clear / Sunny	1	FLIR GF320	None	5	Thief Hatch	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Semiannual	AMOCO CTB BATTERY			7/24/2017	11:51:00 AM	11:57:00 AM		Expert (> 300 hours)	92	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	4	Thief Hatch	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Semiannual	AMOCO CTB BATTERY	7/24/2017	11:51:00 AM	11:57:00 AM	Expert (> 300 hours)	92	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A			
Semiannual	AMOCO CTB BATTERY	7/24/2017	11:51:00 AM	11:57:00 AM	Expert (> 300 hours)	92	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A			
Semiannual	AMOCO CTB BATTERY	7/24/2017	11:51:00 AM	11:57:00 AM	Expert (> 300 hours)	92	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A			
Initial Survey	ARTESIA YESO CTB BATTERY	3/13/2017	10:13:00 AM	10:46:00 AM	Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Enardo Valve (PVRV)	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	ARTESIA YESO CTB BATTERY	3/13/2017	10:13:00 AM	10:46:00 AM	Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Enardo Valve (PVRV)	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	ARTESIA YESO CTB BATTERY	3/13/2017	10:13:00 AM	10:46:00 AM	Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Pressure relief valve	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	ARTESIA YESO CTB BATTERY	3/13/2017	10:13:00 AM	10:46:00 AM	Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Pressure relief valve	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	ARTESIA YESO CTB BATTERY	3/13/2017	10:13:00 AM	10:46:00 AM	Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Pressure relief valve	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	ARTESIA YESO CTB BATTERY	3/13/2017	10:13:00 AM	10:46:00 AM	Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Pressure relief vent	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017	5	N/A	FLIR GF320			
Initial Survey	Cedar Canyon 16-1 Single Well Battery	3/15/2017	12:32:00 PM	12:50:00 PM	Expert (> 300 hours)	79	Clear / Sunny	8	FLIR GF320	None	1	Enardo Valve (PVRV)	None	None	3/30/2017 - DOR	1	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Cedar Canyon 21 Federal 1 Ctb Battery	3/15/2017	11:25:00 AM	11:32:00 AM	Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A			
Initial Survey	CEDAR CANYON 22 CENTRAL SATELLITE	3/15/2017	8:51:00 AM	9:41:00 AM	Expert (> 300 hours)	62	Clear / Sunny	6	FLIR GF320	None	2	Thief Hatch	None	None	3/30/2017 - DOR	2	Leaking after repair/replacement	FLIR GF320			
Initial Survey	CEDAR CANYON 22 CENTRAL SATELLITE	3/15/2017	8:51:00 AM	9:41:00 AM	Expert (> 300 hours)	62	Clear / Sunny	6	FLIR GF320	None	2	Thief Hatch	None	None	3/30/2017 - DOR	2	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Cedar Canyon 22 CTB	3/15/2017	9:47:00 AM	10:27:00 AM	Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	7	Enardo Valve (PVRV)	None	None	3/30/2017 - DOR	7	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Cedar Canyon 22 CTB	3/15/2017	9:47:00 AM	10:27:00 AM																	

Semiannual Survey	Site Name	Latitude	Longitude	(i) Date of the survey	(ii) Survey start time	(ii) Survey end time	(iii) Name of operator(s) performing survey	(iii) Operator training and experience	(iv) Ambient temperature (-F)	(iv) Sky conditions	(iv) Maximum wind speed (mph)	(v) Monitoring instrument used	(vi) Any deviations from the monitoring plan	(vii) Number of components for which fugitive emissions were detected	(vii) Type of component for which fugitive emissions were detected	(viii) Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h)	(ix) Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored	(x) The date of successful repair of the fugitive emissions component	(xi) Number and type of fugitive emissions components placed on delay of repair	(xi) Explanation for each delay of repair	(xii) Type of instrument used to resurvey a repaired fugitive emissions component
Initial Survey	AMOCO CTB BATTERY	(b) (9)		2/21/2017	7:35:00 AM	8:16:00 AM	(b) (6)	Expert (> 300 hours)	53	Clear / Sunny	1	FLIR GF320	None	5	Scrubber vent line compressor	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	AMOCO CTB BATTERY			2/21/2017	7:35:00 AM	8:16:00 AM		Expert (> 300 hours)	53	Clear / Sunny	1	FLIR GF320	None	5	Thief Hatch	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	AMOCO CTB BATTERY			2/21/2017	7:35:00 AM	8:16:00 AM		Expert (> 300 hours)	53	Clear / Sunny	1	FLIR GF320	None	5	Thief Hatch	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	AMOCO CTB BATTERY			2/21/2017	7:35:00 AM	8:16:00 AM		Expert (> 300 hours)	53	Clear / Sunny	1	FLIR GF320	None	5	Thief Hatch	None	None	3/21/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Semiannual	AMOCO CTB BATTERY			7/24/2017	11:51:00 AM	11:57:00 AM		Expert (> 300 hours)	92	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A
Semiannual	AMOCO CTB BATTERY			7/24/2017	11:51:00 AM	11:57:00 AM		Expert (> 300 hours)	92	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A
Semiannual	AMOCO CTB BATTERY			7/24/2017	11:51:00 AM	11:57:00 AM		Expert (> 300 hours)	92	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A
Initial Survey	ARTESIA YESO CTB BATTERY			3/13/2017	10:13:00 AM	10:46:00 AM		Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Enardo Valve (PVRV)	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	ARTESIA YESO CTB BATTERY			3/13/2017	10:13:00 AM	10:46:00 AM		Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Enardo Valve (PVRV)	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	ARTESIA YESO CTB BATTERY			3/13/2017	10:13:00 AM	10:46:00 AM		Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Pressure relief valve	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	ARTESIA YESO CTB BATTERY			3/13/2017	10:13:00 AM	10:46:00 AM		Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Pressure relief valve	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	ARTESIA YESO CTB BATTERY			3/13/2017	10:13:00 AM	10:46:00 AM		Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Pressure relief valve	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320
Initial Survey	ARTESIA YESO CTB BATTERY			3/13/2017	10:13:00 AM	10:46:00 AM		Expert (> 300 hours)	53	Partly Cloudy / Partly Sunny	8	FLIR GF320	None	7	Pressure relief vent	60.5397a(h)(1) - Not repaired within 30 days	None	5/1/2017	5	N/A	FLIR GF320
Initial Survey	Cedar Canyon 16-1 Single Well Battery			3/15/2017	12:32:00 PM	12:50:00 PM		Expert (> 300 hours)	79	Clear / Sunny	8	FLIR GF320	None	1	Enardo Valve (PVRV)	None	None	3/30/2017 - DOR	1	Leaking after repair/replacement	FLIR GF320
Initial Survey	Cedar Canyon 21 Federal 1 Ctb Battery			3/15/2017	11:25:00 AM	11:32:00 AM		Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A
Initial Survey	CEDAR CANYON 22 CENTRAL SATELLITE			3/15/2017	8:51:00 AM	9:41:00 AM		Expert (> 300 hours)	62	Clear / Sunny	6	FLIR GF320	None	2	Thief Hatch	None	None	3/30/2017 - DOR	2	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 22 CENTRAL SATELLITE			3/15/2017	8:51:00 AM	9:41:00 AM		Expert (> 300 hours)	62	Clear / Sunny	6	FLIR GF320	None	2	Thief Hatch	None	None	3/30/2017 - DOR	2	Leaking after repair/replacement	FLIR GF320
Initial Survey	Cedar Canyon 22 CTB			3/15/2017	9:47:00 AM	10:27:00 AM		Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	7	Enardo Valve (PVRV)	None	None	3/30/2017 - DOR	7	Leaking after repair/replacement	FLIR GF320
Initial Survey	Cedar Canyon 22 CTB			3/15/2017	9:47:00 AM	10:27:00 AM		Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	7	Thief Hatch	None	None	3/30/2017 - DOR	7	Leaking after repair/replacement	FLIR GF320
Initial Survey	Cedar Canyon 22 CTB			3/15/2017	9:47:00 AM	10:27:00 AM		Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	7	Thief Hatch	None	None	3/30/2017 - DOR	7	Leaking after repair/replacement	FLIR GF320
Initial Survey	Cedar Canyon 22 CTB			3/15/2017	9:47:00 AM	10:27:00 AM		Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	7	Thief Hatch	None	None	3/30/2017 - DOR	7	Leaking after repair/replacement	FLIR GF320
Initial Survey	Cedar Canyon 22 CTB			3/15/2017	9:47:00 AM	10:27:00 AM		Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	7	Thief Hatch	None	None	3/30/2017 - DOR	7	Leaking after repair/replacement	FLIR GF320
Initial Survey	Cedar Canyon 22 CTB			3/15/2017	9:47:00 AM	10:27:00 AM		Expert (> 300 hours)	62	Clear / Sunny	8	FLIR GF320	None	7	Thief Hatch	None	None	3/30/2017 - DOR	7	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 23-2 CTB BATTERY			3/27/2017	8:59:00 AM	9:24:00 AM		Expert (> 300 hours)	60	Clear / Sunny	5	FLIR GF320	None	3	Enardo Valve (PVRV)	None	None	4/10/2017	None	N/A	FLIR GF320
Initial Survey	CEDAR CANYON 23-2 CTB BATTERY			3/27/2017	8:59:00 AM	9:24:00 AM		Expert (> 300 hours)	60	Clear / Sunny	5	FLIR GF320	None	3	Pressure Safety Valve (PSV)	None	None	4/10/2017	None	N/A	FLIR GF320
Initial Survey	CEDAR CANYON 23-2 CTB BATTERY			3/27/2017	8:59:00 AM	9:24:00 AM		Expert (> 300 hours)	60	Clear / Sunny	5	FLIR GF320	None	3	Thief Hatch	None	None	4/10/2017	None	N/A	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	CEDAR CANYON 28 CTB BATTERY			3/20/2017	11:48:00 AM	12:35:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	9	Thief Hatch	None	None	3/31/2017 - DOR	9	Leaking after repair/replacement	FLIR GF320
Initial Survey	Cedar Canyon 28 Federal 4 Swd Battery			3/20/2017	12:36:00 PM	12:39:00 PM		Expert (> 300 hours)	90	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A
Initial Survey	Christopher Federal 2 Ctb Battery			3/8/2017	9:44:00 AM	10:07:00 AM		Expert (> 300 hours)	68	Mostly Clear / Mostly Sunny	4	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A
Initial Survey	COPPERHEAD 18 STATE 1 BATTERY AND SWD			4/3/2017	1:40:00 PM	2:02:00 PM		Expert (> 300 hours)	80	Clear / Sunny	14	FLIR GF320	None	2	Thief Hatch	None	None	4/10/2017 - DOR	1	Leaking after repair/replacement	FLIR GF320
Initial Survey	COPPERHEAD 18 STATE 1 BATTERY AND SWD			4/3/2017	1:40:00 PM	2:07:00 PM		Expert (> 300 hours)	80	Clear / Sunny	14	FLIR GF320	None	2	Thief Hatch	None	None	4/10/2017	1	N/A	FLIR GF320
Initial Survey	CYPRESS 34 FEDERAL 1 CTB BATTERY			4/3/2017	9:15:00 AM	9:49:00 AM		Expert (> 300 hours)	74	Clear / Sunny	9	FLIR GF320	None	5	Enardo Valve (PVRV)	None	None	4/10/2017 - DOR	3	Leaking after repair/replacement	FLIR GF320
Initial Survey	CYPRESS 34 FEDERAL 1 CTB BATTERY			4/3/2017	9:15:00 AM	9:49:00 AM		Expert (> 300 hours)	74	Clear / Sunny	9	FLIR GF320	None	5	Thief Hatch	None	None	4/10/2017 - DOR	3	Leaking after repair/replacement	FLIR GF320
Initial Survey	CYPRESS 34 FEDERAL 1 CTB BATTERY			4/3/2017	9:15:00 AM	9:49:00 AM		Expert (> 300 hours)	74	Clear / Sunny	9	FLIR GF320	None	5	Thief Hatch	None	None	4/10/2017 - DOR	3	Leaking after repair/replacement	FLIR GF320
Initial Survey	CYPRESS 34 FEDERAL 1 CTB BATTERY			4/3/2017	9:15:00 AM	9:49:00 AM		Expert (> 300 hours)	74	Clear / Sunny	9	FLIR GF320	None	5	Thief Hatch	None	None	4/10/2017	3	N/A	FLIR GF320
Initial Survey	Dws Federal 6 Single Well Battery			3/6/2017	9:26:00 AM	9:41:00 AM		Expert (> 300 hours)	68	Partly Cloudy / Partly Sunny	25	FLIR GF320	None	2	Enardo Valve (PVRV)	60.5397a(h)(1) & (3) - Not repaired/resurveyed within 30 days	None	5/1/2017	N/A	N/A	FLIR GF320
Initial Survey	Dws Federal 6 Single Well Battery			3/6/2017	9:26:00 AM	9:41:00 AM		Expert (> 300 hours)	68	Partly Cloudy / Partly Sunny	25	FLIR GF320	None	2	Thief Hatch	60.5397a(h)(1) & (3) - Not repaired/resurveyed within 30 days	None	5/1/2017	N/A	N/A	FLIR GF320
Initial Survey	Elizondo A4 Battery			4/20/2017	1:13:00 PM	1:17:00 PM		Expert (> 300 hours)	85	Clear / Sunny	13	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A
Initial Survey	Foxglove Fed 2906H			6/15/2017	11:43:00 AM	12:17:00 PM		Expert (> 300 hours)	103	Mostly Clear / Mostly Sunny	3	FLIR GF320	None	4	Enardo Valve (PVRV)	60.5397a(h)(1) & (3) - Not repaired/resurveyed within 30 days	None	N/A	N/A	N/A	N/A
Initial Survey	Foxglove Fed 2906H			6/15/2017	11:43:00 AM	12:17:00 PM		Expert (> 300 hours)	103	Mostly Clear / Mostly Sunny	3	FLIR GF320	None	4	Thief Hatch	60.5397a(h)(1) & (3) - Not repaired/resurveyed within 30 days	None	N/A	N/A	N/A	N/A
Initial Survey	Foxglove Fed 2906H			6/15/2017	11:43:00 AM	12:17:00 PM		Expert (> 300 hours)	103	Mostly Clear / Mostly Sunny	3	FLIR GF320	None	4	Thief Hatch	60.5397a(h)(1) & (3) - Not repaired/resurveyed within 30 days	None	N/A	N/A	N/A	N/A
Initial Survey	Foxglove Fed 2906H			6/15/2017	11:43:00 AM	12:17:00 PM		Expert (> 300 hours)	103	Mostly Clear / Mostly Sunny	3	FLIR GF320	None	4	Thief Hatch	60.5397a(h)(1) & (3) - Not repaired/resurveyed within 30 days	None	N/A	N/A	N/A	N/A
Initial Survey	Goodnight 35 Federal 2H Well Battery	4/3/2017	10:03:00 AM	10:05:00 AM	Expert (> 300 hours)	74	Clear / Sunny	9	FLIR GF320	None	0	None	None	None	N/A	N/A	N/A	N/A			
Initial Survey	GOVERNMENT AG 01 SINGLE WELL BATTERY	3/6/2017	8:51:00 AM	9:06:00 AM	Expert (> 300 hours)	65	Partly Cloudy / Partly Sunny	25	FLIR GF320	None	1	Thief Hatch	60.5397a(h)(1) & (3) - Not repaired/resurveyed within 30 days	None	5/1/2017	N/A	N/A	FLIR GF320			
Initial Survey	Haron 15 8 And 15 Ctb Battery	3/15/2017	11:43:00 AM	12:02:00 PM	Expert (> 300 hours)	72	Clear / Sunny	8	FLIR GF320	None	5	Thief Hatch	None	None	3/31/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Haron 15 8 And 15 Ctb Battery	3/15/2017	11:43:00 AM	12:02:00 PM	Expert (> 300 hours)	72	Clear / Sunny	8	FLIR GF320	None	5	Thief Hatch	None	None	3/31/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Haron 15 8 And 15 Ctb Battery	3/15/2017	11:43:00 AM	12:02:00 PM	Expert (> 300 hours)	72	Clear / Sunny	8	FLIR GF320	None	5	Thief Hatch	None	None	3/31/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Haron 15 8 And 15 Ctb Battery	3/15/2017	11:43:00 AM	12:02:00 PM	Expert (> 300 hours)	72	Clear / Sunny	8	FLIR GF320	None	5	Thief Hatch	None	None	3/31/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Haron 15 8 And 15 Ctb Battery	3/15/2017	11:43:00 AM	12:02:00 PM	Expert (> 300 hours)	72	Clear / Sunny	8	FLIR GF320	None	5	Thief Hatch	None	None	3/31/2017 - DOR	5	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Misty Ione Ctb (35 Federal 4H Battery)	2/21/2017	11:08:00 AM	11:21:00 AM	Expert (> 300 hours)	76	Clear / Sunny	6	FLIR GF320	None	6	Enardo Valve (PVRV)	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Misty Ione Ctb (35 Federal 4H Battery)	2/21/2017	11:08:00 AM	11:21:00 AM	Expert (> 300 hours)	76	Clear / Sunny	6	FLIR GF320	None	6	Enardo Valve (PVRV)	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Misty Ione Ctb (35 Federal 4H Battery)	2/21/2017	11:08:00 AM	11:21:00 AM	Expert (> 300 hours)	76	Clear / Sunny	6	FLIR GF320	None	6	Thief Hatch	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Misty Ione Ctb (35 Federal 4H Battery)	2/21/2017	11:08:00 AM	11:21:00 AM	Expert (> 300 hours)	76	Clear / Sunny	6	FLIR GF320	None	6	Thief Hatch	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320			
Initial Survey	Misty Ione Ctb (35 Federal 4H Battery)	2/21/2017	11:08:00 AM	11:21:00 AM	Expert (> 300 hours)	76	Clear / Sunny	6	FLIR GF320	None	6	Thief Hatch	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320			
Semiannual	Misty Ione Ctb (35 Federal 4H Battery)	7/24/2017	9:52:00 AM	10:13:00 AM	Expert (> 300 hours)	82	Mostly Clear / Mostly														

Table 5: Fugitive Emissions

Semiannual Survey	Site Name	Latitude	Longitude	(i) Date of the survey	(ii) Survey start time	(ii) Survey end time	(iii) Name of operator(s) performing survey	(iii) Operator training and experience	(iv) Ambient temperature (°F)	(iv) Sky conditions	(iv) Maximum wind speed (mph)	(v) Monitoring instrument used	(vi) Any deviations from the monitoring plan	(vii) Number of components for which fugitive emissions were detected	(vii) Type of component for which fugitive emissions were detected	(viii) Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h)	(ix) Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored	(x) The date of successful repair of the fugitive emissions component	(xi) Number and type of fugitive emission components placed on delay of repair	(xi) Explanation for each delay of repair	(xii) Type of instrument used to resurvey a repaired fugitive emissions component
Initial Survey	PIGLET CENTRAL TANK BATTERY	(b) (9)		4/5/2017	8:56:00 AM	9:34:00 AM	(b) (6)	Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Pressure Safety Valve (PSV)	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	PIGLET CENTRAL TANK BATTERY			4/5/2017	8:56:00 AM	9:34:00 AM		Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Pressure Safety Valve (PSV)	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	PIGLET CENTRAL TANK BATTERY			4/5/2017	8:56:00 AM	9:34:00 AM		Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Thief Hatch	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	PIGLET CENTRAL TANK BATTERY			4/5/2017	8:56:00 AM	9:34:00 AM		Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Thief Hatch	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	PIGLET CENTRAL TANK BATTERY			4/5/2017	8:56:00 AM	9:34:00 AM		Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Thief Hatch	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	PIGLET CENTRAL TANK BATTERY			4/5/2017	8:56:00 AM	9:34:00 AM		Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Thief Hatch	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	PIGLET CENTRAL TANK BATTERY			4/5/2017	8:56:00 AM	9:34:00 AM		Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Thief Hatch	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	PIGLET CENTRAL TANK BATTERY			4/5/2017	8:56:00 AM	9:34:00 AM		Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Thief Hatch	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	PIGLET CENTRAL TANK BATTERY			4/5/2017	8:56:00 AM	9:34:00 AM		Expert (> 300 hours)	40	Clear / Sunny	5	FLIR GF320	None	15	Thief Hatch	None	None	4/20/2017 - DOR	15	Leaking after repair/replacement	FLIR GF320
Initial Survey	Red Tank 23 Federal 1 Ctb Battery			4/3/2017	12:15:00 PM	12:18:00 PM		Expert (> 300 hours)	79	Clear / Sunny	11	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A
Initial Survey	SMOKEY BITS STATE COM CTB			2/21/2017	10:01:00 AM	10:14:00 AM		Expert (> 300 hours)	70	Clear / Sunny	3	FLIR GF320	None	4	Enardo Valve (PVRV)	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320
Initial Survey	SMOKEY BITS STATE COM CTB			2/21/2017	10:01:00 AM	10:14:00 AM		Expert (> 300 hours)	70	Clear / Sunny	3	FLIR GF320	None	4	Thief Hatch	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320
Initial Survey	SMOKEY BITS STATE COM CTB			2/21/2017	10:01:00 AM	10:14:00 AM		Expert (> 300 hours)	70	Clear / Sunny	3	FLIR GF320	None	4	Thief Hatch	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320
Initial Survey	SMOKEY BITS STATE COM CTB			2/21/2017	10:01:00 AM	10:14:00 AM		Expert (> 300 hours)	70	Clear / Sunny	3	FLIR GF320	None	4	Thief Hatch	None	None	3/22/2017 - DOR	4	Leaking after repair/replacement	FLIR GF320
Semiannual	SMOKEY BITS STATE COM CTB			7/24/2017	10:19:00 AM	10:32:00 AM		Expert (> 300 hours)	86	Mostly Clear / Mostly Sunny	5	FLIR GF320	None	4	Enardo Valve (PVRV)	None	None	DOR	4	Leaking after repair/replacement	N/A
Semiannual	SMOKEY BITS STATE COM CTB			7/24/2017	10:19:00 AM	10:32:00 AM		Expert (> 300 hours)	86	Mostly Clear / Mostly Sunny	5	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A
Semiannual	SMOKEY BITS STATE COM CTB			7/24/2017	10:19:00 AM	10:32:00 AM		Expert (> 300 hours)	86	Mostly Clear / Mostly Sunny	5	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A
Semiannual	SMOKEY BITS STATE COM CTB			7/24/2017	10:19:00 AM	10:32:00 AM		Expert (> 300 hours)	86	Mostly Clear / Mostly Sunny	5	FLIR GF320	None	4	Thief Hatch	None	None	DOR	4	Leaking after repair/replacement	N/A
Initial Survey	State Dwr Battery			3/13/2017	8:39:00 AM	8:48:00 AM		Expert (> 300 hours)	47	Mostly Clear / Mostly Sunny	14	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A
Initial Survey	Sterling Silver 33 7 Federal Ctb Central Battery			3/8/2017	11:00:00 AM	11:15:00 AM		Expert (> 300 hours)	79	Mostly Clear / Mostly Sunny	6	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A
Initial Survey	Sunrise 8 Federal 3 Ctb Battery			3/8/2017	10:44:00 AM	10:46:00 AM		Expert (> 300 hours)	77	Mostly Clear / Mostly Sunny	7	FLIR GF320	None	0	None	None	None	N/A	None	N/A	N/A

Table 6: Potential Deviations

Dev. Item No.	Site Name	Deviation Period		Deviation Description	Cause	Action
		Start Date	End Date			
1	CYPRESS 34 FEDERAL 10H	09/21/2015	10/07/2015	§60.5420a(c)(1)(iii)(A) - Well Completion Records	Incomplete flowback reports that do not include the date and time for flowback events or duration and disposition of recovery.	A Flowback Data Collection Form has been created to capture all information required by §60.5420a(c)(1). Improved communication with field personnel and routine analysis of data collection will be utilized to ensure complete recordkeeping.
2	SMOKEY BITS STATE COM 006H	09/13/2016	09/14/2016	§60.5420a(c)(1)(iii)(A) - Well Completion Records	Incomplete flowback reports that do not include the date and time for flowback events or duration and disposition of recovery.	A Flowback Data Collection Form has been created to capture all information required by §60.5420a(c)(1). Improved communication with field personnel and routine analysis of data collection will be utilized to ensure complete recordkeeping.
3	CEDAR CANYON 28 FEDERAL 006H	12/16/2015	01/12/2016	§60.5420a(c)(1)(iii)(A) - Well Completion Records	Incomplete flowback reports that do not include the date and time for flowback events or duration and disposition of recovery.	A Flowback Data Collection Form has been created to capture all information required by §60.5420a(c)(1). Improved communication with field personnel and routine analysis of data collection will be utilized to ensure complete recordkeeping.
4	ARTESIA YESO FEDERAL UNIT 27Y	06/16/2017	06/20/2017	§60.5420a(c)(1)(iii)(A) - Well Completion Records	Incomplete flowback reports that do not include the date and time for flowback events or duration and disposition of recovery.	A Flowback Data Collection Form has been created to capture all information required by §60.5420a(c)(1). Improved communication with field personnel and routine analysis of data collection will be utilized to ensure complete recordkeeping.
5	ARTESIA YESO CTB BATTERY	03/13/2017	05/01/2017	60.5397a(h)(1) - Repair/replace within 30 days	Repair/replacement of the leaking fugitive emissions component was not completed within 30 days.	Improved communication and training with field personnel and routine analysis of work orders will be utilized to ensure each repair/replacement is completed as soon as practicable.
6	Dwu Federal 6 Single Well Battery	03/06/2017	05/01/2017	60.5397a(h)(1) & (3) - Repair/replace and resurvey within 30 days	Repair/replacement and resurvey of the leaking fugitive emissions component was not completed within 30 days.	Improved communication and training with field personnel and routine analysis of work orders will be utilized to ensure each repair/replacement and resurvey is completed as soon as practicable.
7	Foxglove Fed 2906H	06/15/2017	In progress	60.5397a(h)(1) & (3) - Repair/replace and resurvey within 30 days	Repair/replacement and resurvey of the leaking fugitive emissions component was not completed within 30 days.	Improved communication and training with field personnel and routine analysis of work orders will be utilized to ensure each repair/replacement and resurvey is completed as soon as practicable.
8	GOVERNMENT AG 01 SINGLE WELL BATTERY	03/06/2017	05/01/2017	60.5397a(h)(1) & (3) - Repair/replace and resurvey within 30 days	Repair/replacement and resurvey of the leaking fugitive emissions component was not completed within 30 days.	Improved communication and training with field personnel and routine analysis of work orders will be utilized to ensure each repair/replacement and resurvey is completed as soon as practicable.
9	Misty Ivore Ctb (35 Federal 4H Battery)	07/24/2017	08/08/2017	60.5397a(h)(3) - Resurvey within 30 days	Resurvey of the leaking fugitive emissions components was not completed within 30 days.	Improved communication and training with field personnel and routine analysis of work orders will be utilized to ensure each resurvey is completed as soon as practicable.

PROFESSIONAL ENGINEERING DESIGN OF CLOSED VENT SYSTEMS AND STORAGE CONTROL DEVICES - NSPS OOOOa

PTE Analysis for Storage Vessels Analysis per NSPS OOOOa Requirements

Resources or EOR:	Resources
Facility:	Peaches 19-1 Battery
Basin:	Delaware - New Mexico
Control Type:	Vapor Combustion Unit
Manufacturer:	Kimark
Model Number:	SmartFlare 28
Total Height:	21 ft 10 in
Flare Diameter:	28 in
Enrichment Gas?:	No
Design Heat Release:	1.25 MM8TU/hr
Destruction Efficiency:	99.90%
Normal Operating Pressure:	Ounces 0 to 16
Design Pressure:	80 PSI
Max Design Temp:	1900 degree shutdown
Min Design Temp:	1200 degrees
Normal Operating Temp:	1400 degrees
Pilot Volumetric Rate:	8.5 to 12 SCF/hr
Pilot Continuous or Auto:	Automatic
Number of burner tips:	1
Diameter of burner tips:	2 inch
EPA Approved:	Yes - see EPA Performance Testing for Combustion Control Devices: https://www3.epa.gov/airquality/oilandgas/pdfs/mantesteddevices.pdf
Refrac Only:	No
Subject to NSPS OOOO:	Yes
Subject to NSPS OOOOa:	Yes
Number of Oil Tanks:	8
Throughput End Date:	2/15/2016
BOPD/tank:	193.8
Permit Type:	NOI
PTE for all Oil Tanks PTE (TPV):	723.32
PTE per Oil Tank (TPV/Tank):	90.415
Control Type:	VCU
Capture Efficiency of Control:	98%
VCU Rated Capacity (MSCFD):	30
Gas Volume to VCU from Oil Tanks (MSCFD):	28.7
Adequate VCU Capacity?:	Yes
Final Controlled VOCs all Oil Tanks:	14.5
Final Controlled VOCs per Oil Tank:	1.8

Professional Engineering Certification

By means of this certification I attest:

- (i) That I am familiar with the requirements of 40 CFR Parts 60 and 63;
- (ii) That I have reviewed the minimum design criteria of the closed vent and control device system designed to meet the requirements of the rule, i.e., the closed vent system must be capable of routing all gases, vapors, and fumes emitted from the affected facility to a control device or to a process that meets the requirements of the rule.
- (iii) That the closed vent system design for the affected facility is capable of routing all gases, vapors, and fumes emitted from the affected emission sources based on the following:
 - 1. Review of the Control Technologies to be Used to Comply with §§ 60.5380a and 60.5395a.
 - 2. Closed Vent System Design Criteria:
 - a. Piping—
 - i. Size (include all emissions, not just affected facility);
 - ii. Back pressure, including low points which collect liquids;
 - iii. Pressure losses; and
 - iv. Bypasses and pressure release points.
 - 3. Affected Facility Considerations:
 - a. Peak Flow from affected facility, including flash emissions, if applicable; and
 - b. Bypasses, pressure release points.
 - 4. Control Device Considerations:
 - a. Maximum volumetric flow rate based on peak flow, and
 - b. Ability to handle future gas flow.

This certification shall in no way relieve the affected facility or owner(s)/operator(s) of its duty to fully implement and operate the closed vent system design in accordance with the design criteria reviewed herein and with the requirements of 40 CFR Parts 60 and 63.

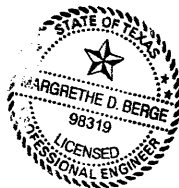
Professional Engineer: Margrethe D. Berge

Signature: 

Registration Number: 98319

State: Texas

Date: 2 August 2016



EMISSION RATE ESTIMATE FOR STORAGE VESSELS - PTE FOR OIL STORAGE TANKS

No. of Oil Tanks: 8

Unit ID	Annual Average Throughput (bbl/day/tank)	Material Stored	UNCONTROLLED EMISSION RATES						CONTROLLED EMISSION RATES					
			VOC		HAPs		H ₂ S		VOC		HAPs		H ₂ S	
			(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
TANK 1 thru 8; W&S	193.8	Oil	1.83	42.5	0.107	2.500	1.4E-06	3.2E-05	0.037	0.85	0.002	0.050	2.8E-08	6.5E-07
TANK 1 thru 8; Flash			152.0	680.8	8.96	40.00	1.2E-04	5.2E-04	3.040	13.600	0.179	0.800	2.3E-06	1.0E-05
TOTAL (TK-VCU)			153.8	723.3	9.067	42.50	1.2E-04	5.5E-04	3.08	14.5	0.181	0.850	2.4E-06	1.1E-05

Notes:

Annual average oil throughput for site = 1550 bbl/day, divided over 8 tanks.
Max. hourly oil tank emission rate based on = 1550 bbl/day, divided over 8 tanks.
VOC Content of Tank Emissions = 100 %
Emissions from water tanks are estimated as 1 % of the emissions calculated using oil properties
VCU control efficiency = 98 %

Emission rates from each tank may vary, but the total rate from the tanks will not be exceeded. Oil tank emissions are 100 % VOC. HAP emission rates are included in the total VOC emission rates.

OIL STORAGE TANK

Working and standing losses:

10630 lb/yr total for one tank (from AP-42)
5.32 ton/yr total for one oil tank
0.229 lb/hr total for each oil tank (maximum)

Flash losses:

85.10 ton/yr total for 193.75 bbl/day/tank (from Vasquez-Beggs)
19.00 lb/hr total for each oil tank (from Vasquez-Beggs)

UNCONTROLLED SPECIATED EMISSIONS FROM EACH OIL TANK

	Wt% from: Estimated from E&P Tank, Database Case No. 63	W&S		Flash		Total	
		Short-term Emissions (lb/hr)	Annual Emissions (ton/yr)	Short-term Emissions (lb/hr)	Annual Emissions (ton/yr)	Short-term Emissions (lb/hr)	Annual Emissions (ton/yr)
Hydrogen Sulfide	0.00008	1.7E-07	4.1E-06	1.5E-05	6.5E-05	1.5E-05	6.9E-05
Benzene	1.21	0.003	0.064	0.230	1.03	0.233	1.090
Toluene	0.858	0.002	0.046	0.163	0.730	0.165	0.776
Ethylbenzene	0.012	2.7E-05	6.2E-04	2.2E-03	9.9E-03	2.2E-03	1.1E-02
Xylenes	0.092	2.1E-04	0.005	0.017	0.078	0.018	0.083
n-Hexane	3.7	0.008	0.197	0.703	3.150	0.711	3.35
TOTAL VOC	100	0.229	5.32	19.00	85.1	19.20	90.4
TOTAL HAPs	5.87	0.013	0.312	1.12	5.00	1.13	5.31

CONTROLLED SPECIATED EMISSIONS FROM EACH OIL TANK

	Wt% from: Estimated from E&P Tank, Database Case No. 63	W&S		Flash		Total	
		Short-term Emissions (lb/hr)	Annual Emissions (ton/yr)	Short-term Emissions (lb/hr)	Annual Emissions (ton/yr)	Short-term Emissions (lb/hr)	Annual Emissions (ton/yr)
Hydrogen Sulfide	0.00008	3.5E-09	8.1E-08	2.9E-07	1.3E-06	2.9E-07	1.4E-06
Benzene	1.21	5.5E-05	1.3E-03	4.6E-03	2.1E-02	4.7E-03	2.2E-02
Toluene	0.858	3.9E-05	9.1E-04	3.3E-03	1.5E-02	3.3E-03	1.6E-02
Ethylbenzene	0.012	5.3E-07	1.2E-05	4.4E-05	2.0E-04	4.5E-05	2.1E-04
Xylenes	0.092	4.2E-06	9.8E-05	3.5E-04	1.6E-03	3.5E-04	1.7E-03
n-Hexane	3.7	1.7E-04	3.9E-03	1.4E-02	6.3E-02	1.4E-02	6.7E-02
TOTAL VOC	100	0.005	0.106	0.380	1.700	0.384	1.81
TOTAL HAPs	5.87	0.000	0.006	0.022	0.100	0.023	0.106

(1) Hydrogen sulfide content estimated based on representative as analysis.

W&S EMISSION ESTIMATE FOR TANK 1 thru 8

Tank FIN	TANK 1 thru 8
Tank EPN	TK-VCU
Description	Oil Storage Tank
Days per year	365

Tank Parameters

Shell Diameter (D)	15.5	ft
Shell Height (Hs)	16	ft
Maximum Liquid Height (Hlx)	16	ft
Roof Type	Cone	
Cone Roof Slope (Sr)	0.0625	ft/ft
Paint Color	Shale Green	
Paint Condition	Good	
Paint Solar Absorptance (a)	0.89	(AP-42 Table 7.1-6)
Tank Heated (Yes/No)	No	
Breather Vent Pressure Setting (PBp)	0.03	psia
Breather Vent Vacuum Setting (PBV)	-0.03	psia

Stored Material Properties

Vapor Molecular Weight (Mv)	50	lb/lb-mol
API Gravity (API)	46.8	° API (from client)
Reid Vapor Pressure (RVP)	6.68	psi (from client)
Product Factor (Kp)	0.75	

Environment Properties - Roswell, New Mexico (TANKS 4.0.9d database)

Daily Max Ambient Temperature (Tax)	75.73	°F
Daily Min Ambient Temperature (Tan)	45.9	°F
Solar Insolation (I)	1810.0	BTU/ft ² d
Atmospheric Pressure (Pa)	12.73	psia

Operational Parameters

Actual Throughput (BBL/day)	193.8	BBL/day
Actual Throughput (BBL/year)	70,719	BBL/year
Actual Throughput (Gal/year)	2,970,188	Gal/year
Low Liquid Level set-point (ft)	0.0	ft
High Liquid Level set-point (ft)	16.0	ft
Change in Liquid Level (ft)	16.0	ft
Throughput Adjustment Factor	1.00	-
Adjusted Throughput (Q) (BBL/year)	70,719	BBL/year
Adjusted Throughput (Gal/year)	2,970,188	Gal/year
Max Fill Rate (FRm) (BBL/hr)	0.78	BBL/hr

Constants

Universal Gas Constant (R)	10.731	psia ft ³ /lb-mol °R
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Standing and Working Loss Calculations

Daily Max Ambient Temperature (Tax)	535.4	°R
Daily Min Ambient Temperature (T _{an})	505.6	°R
Shell Radius (Rs)	7.75	ft
Liquid Height (Hl)	8	ft
Roof Height (Hr)	0.48	ft
Roof Outage (Hro)	0.16	ft
Vapor Space Outage (Hvo)	8.16	ft
Vapor Space Volume (Vv)	1540	ft ³
Maximum Liquid Volume (Vlx)	3019	ft ³
Tank Capacity	22583	gal
Daily Average Ambient Temperature (T _{aa})	520.5	°R
Liquid Bulk Temperature (Tb)	524.8	°R
Daily Avg Liquid Surface Temperature (Tla)	535.6	°R
Daily Max Liquid Surface Temperature (Tlx)	552.3	°R
Daily Min Liquid Surface Temperature (Tln)	519.0	°R
Vapor Pressure at TLA (Pva)	5.68	psia
Vapor Pressure at TLX (Pvx)	7.51	psia
Vapor Pressure at TLN (Pvn)	4.22	psia
Vapor Pressure at Tb	4.7	psia
Vapor Density (Wv)	0.049	lb/ft ³
Daily Ambient Temperature Range (dT _a)	29.8	°R
Daily Vapor Temperature Range (dT _v)	66.6	°R
Daily Vapor Pressure Range (dP _v)	3.29	psia
Breather Vent Pressure Range (dP _b)	0.06	psia
Vapor Space Expansion Factor (Ke)	0.58	
Vented Vapor Saturation Factor (Ks)	0.29	
Standing Storage Loss (Ls)	4,678.94	lb/year
Turnovers per Period (N)	131.50	
Turnover Factor (Kn)	0.39	
Working Loss (Lw)	5,947	lb/year
Uncontrolled Total Annual Loss (Lt)	10,630	lb/year
Uncontrolled Total Annual Loss (Lt)	5.32	tons/year
Max Hourly Working Loss (lb/hr)	0.229	lb/hr

VOC Emission Calculation from Flashing

Vasquez-Beggs Solution Gas/Oil Ratio Correlation Method

EPN: TANK 1 thru 8
 Material: Crude Oil

Basis: This spreadsheet calculates VOC flash losses from petroleum production storage tanks. The method is based on the Vasquez-Beggs Solution Gas/Oil Ratio Correlation Method. This method uses the specific gravity of the dissolved gas (SG) at 100 psig. Some states require this method.

Correlated Flashing Loss Equation

$$L_f = \text{GOR} * Q * \text{GD} * (100 - E)/100$$

Variable Definitions and Input Data:

Variable Description	Value	Source
L_f = flashing losses (lb/yr)	-	Calculated
GOR = gas to oil ratio (scf/bbl)	-	Calculated
VP = Upstream vessel pressure (psig)	60	Site Specific Data
UP = Upstream pressure, (psia)	72.73	Calculated based on $UP = VP + 12.731$
APIG = API gravity, (degrees API)	46.8	Site Specific Data
T = liquid temperature (°F) in vessel	95	Estimate
C1 = Vasquez-Beggs constant	0.0178	Table 22.6, pg 22-8, PE Handbook
C2 = Vasquez-Beggs constant	1.187	Table 22.6, pg 22-8, PE Handbook
C3 = Vasquez-Beggs constant	23.93	Table 22.6, pg 22-8, PE Handbook
Q_A = annual oil production rate (bbl/yr)	70,719	client (bbl/yr/tank)
Q_M = maximum pump rate into tank (bbl/hr) *	8.07	client (bbl/hr/tank)
GD = gas density (lb/ft ³)	-	Calculated
SG = specific gravity of gas in separator (air = 1.0)	0.900	Assumed
MW = molecular weight of gas (lb/lbmol)	50	Default for Crude Oil
E = Control Efficiency, (% reduction)	0	Production Reports
Operating Schedule (hr/yr)	8760	Production Reports

* If the maximum pump rate is not specified, the hourly flashing loss will be calculated based on the annual throughput divided by the hours of operation.

* Assume emissions are 100% VOC.

Emissions Calculations:

Determination of specific gravity of dissolved gas at 100 psig (SGx):

$$\text{SGx} = \text{SG} * [1.0 + 0.00005912 * \text{APIG} * T * \text{Log}(UP/114.7)]$$

$$\text{SGx} = 0.9 * [1.0 + 0.00005912 * 46.8 * 95 * \text{Log}(72.731/114.7)]$$

$$= 0.85$$

Determination of gas density (GD):

$$\text{GD} = \text{MW} / 385 \text{ ft}^3/\text{lbmol}$$

$$\text{GD} = 50 \text{ lb/lbmol} / 385 \text{ ft}^3/\text{lbmol}$$

$$= 0.1299 \text{ lb/ft}^3$$

Determination of Gas to Oil Ratio (GOR):

$$\text{GOR} = C1 * \text{SGx} * \text{UP}^{(C2)} * e^{[(C3 * \text{APIG}) / (T + 460)]}$$

$$\text{GOR} = 0.0178 * 0.8532 * [(72.731)^{1.187}] * \exp[(23.931 * 46.8)/(95 + 460)] = 18.52 \text{ scf/bbl}$$

Determination of Correlated Flashing Loss:

Annual:

$$L_f = \text{GOR} * Q_A * \text{GD} * (100 - E)/100$$

$$L_f = 18.52 \text{ ft}^3/\text{bbl} * 70718.75 \text{ bbl/yr} * 0.1299 \text{ lb/ft}^3 * (100 - 0)/100 = 170,124 \text{ lb/yr}$$

Hourly:

$$L_f = \text{GOR} * Q_M * \text{GD} * (100 - E)/100$$

$$L_f = 18.52 \text{ ft}^3/\text{bbl} * 8.07 \text{ bbl/hr} * 0.1299 \text{ lb/ft}^3 * (100 - 0)/100 = 19.0 \text{ lb/hr}$$

Emissions Summary (per tank):

Facility	Emission Rate	
	(lb/hr)	(ton/yr)
TANK 1 thru 8	19.00	85.06

Peaches 19 Fed #1 Battery**Mole % to Weight % Conversion**

From Peaches 19 Federal Gas Analysis

Gas Composition Information:

	Inlet Gas mole %	Gas M.W. lb/lb-mole	S.G.	Wt. %
Nitrogen, N2	1.473	0.413	0.014	2.061
Carbon Dioxide, CO2	0.149	0.066	0.002	0.328
Hydrogen Sulfide, H2S	0.0001	0.00003	0.000001	0.0002
Methane, CH4	80.450	12.904	0.446	64.440
Ethane, C2H6	11.588	3.484	0.120	17.400
Propane	4.402	1.941	0.067	9.694
Iso-Butane	0.400	0.233	0.008	1.162
Normal Butane	1.050	0.610	0.021	3.049
Iso Pentane	0.154	0.111	0.004	0.554
Normal Pentane	0.178	0.128	0.004	0.642
Hexane +	0.156	0.134	0.005	0.670
Total:	100.00	20.025	0.691	100.000

VOC Wt. %: 15.771



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Amoco 21 Federal No1 H Central Tank Battery	(b) (6)	02/21/2017	07:35	08:16

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

02/21/2017

60.5420a(b)(7)(i)

Survey Start Time

07:35

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Amoco 21 Federal No1 H Central Tank Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

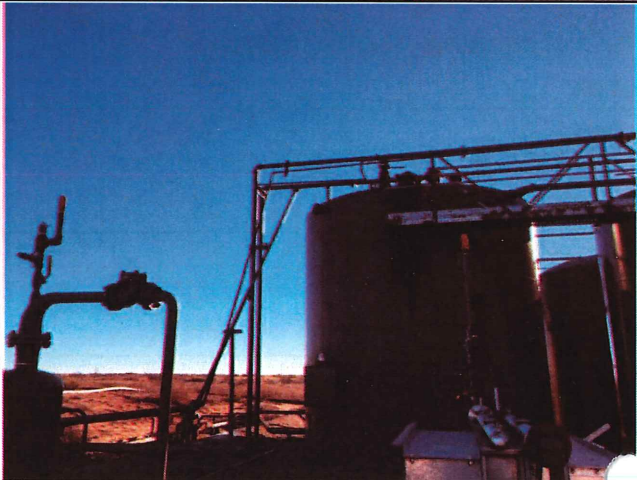

Yes

60.5420a(b)(7)(vii) & (viii)



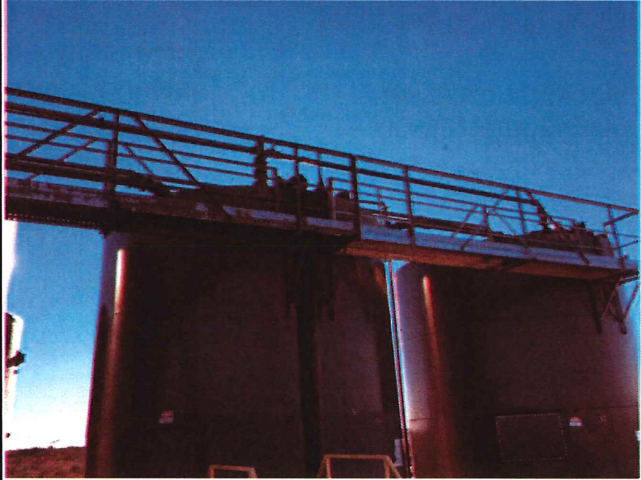

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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 Thief hatch or tank relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 pressure relief safety valve behind thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

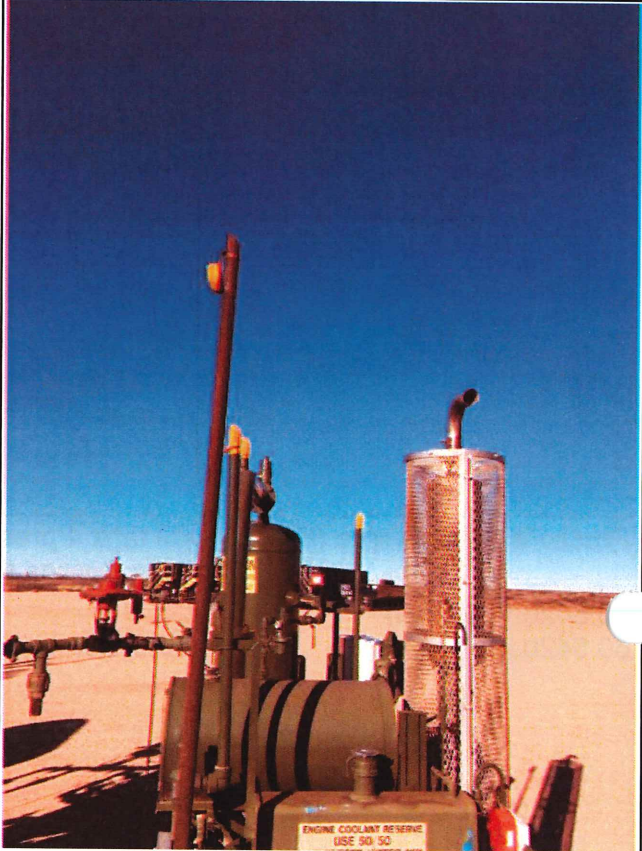


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 pressure safety valve behind thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 pressure relief valve behind thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Other (please describe) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Compressor MP-1079 left side of scrubber vent line compressor is off 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Survey Conditions

Max Wind Speed (MPH)

1

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

53

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

5.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

5.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

08:16

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
AMOCO CTB BATTERY	(b) (6)	07/24/2017	11:51	11:57

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

07/24/2017

60.5420a(b)(7)(i)

Survey Start Time

11:51

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

AMOCO CTB BATTERY

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

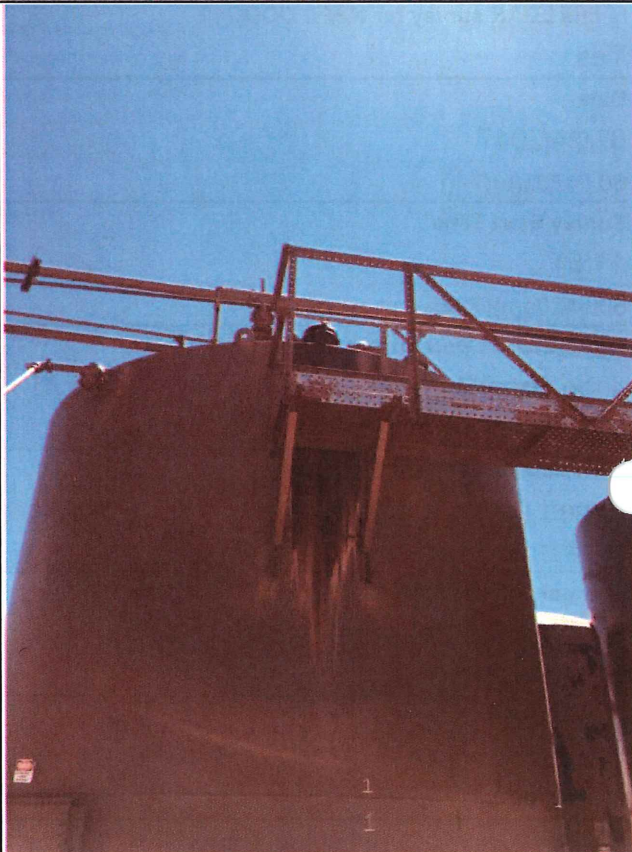
Yes

60.5420a(b)(7)(vii) & (viii)



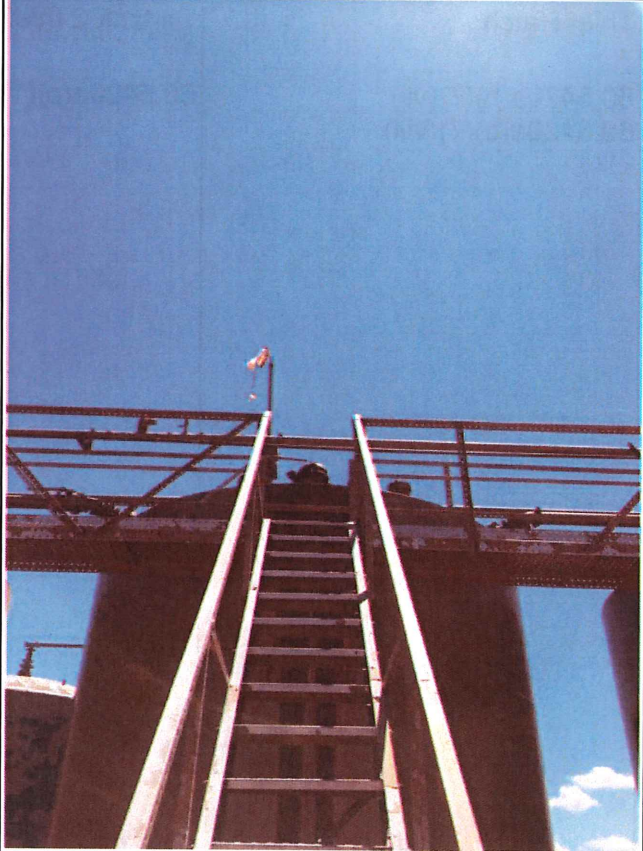
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

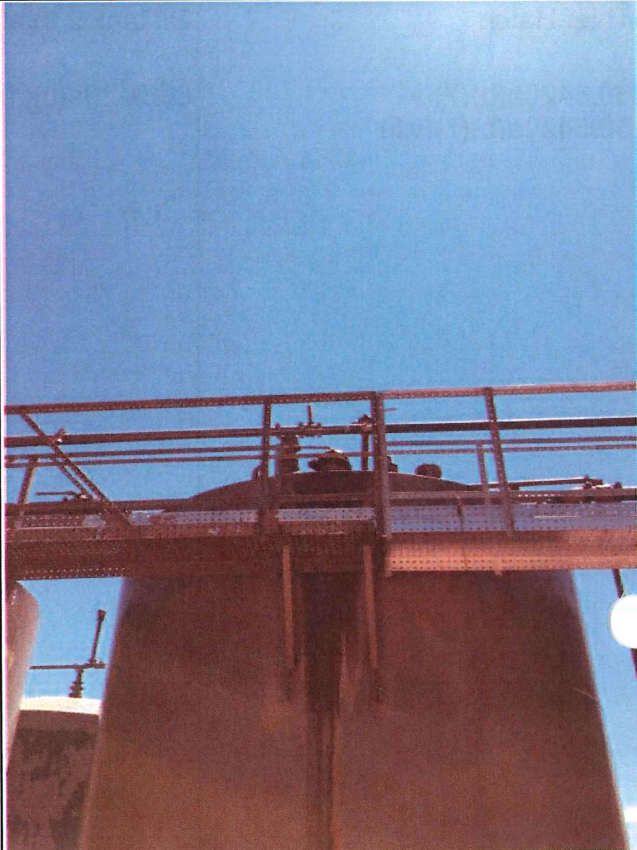


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

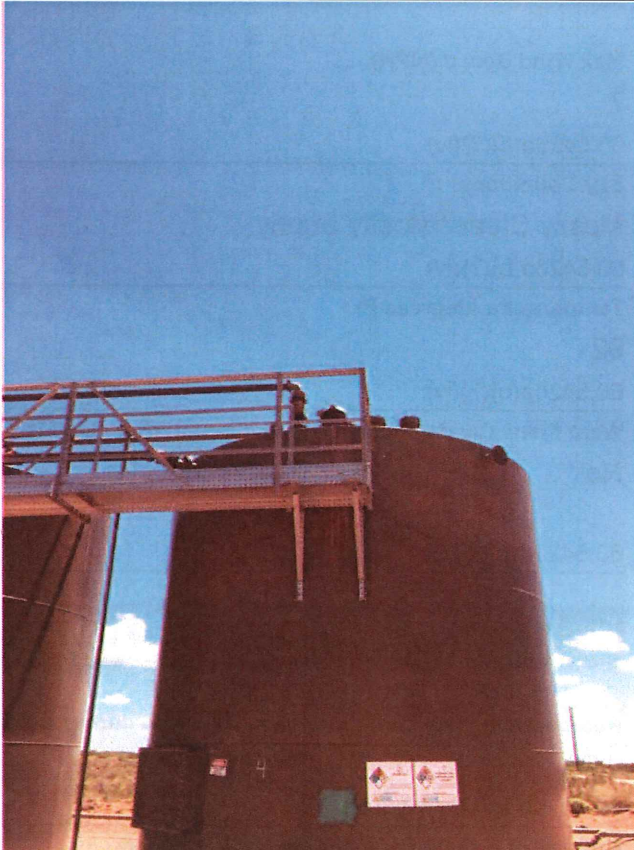


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

7

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

92

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

4.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

4.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

11:57

60.5420a(b)(7)(ii)



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Facility ARTESIA YESO CTB BATTERY	OGI Camera Operator Name John Grenko	Date 03/13/2017	Survey Start Time 10:13	Survey End Time 10:46
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Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/13/2017

60.5420a(b)(7)(i)

Survey Start Time

10:13

60.5420a(b)(7)(ii)

OGI Camera Operator Name

John Grenko

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

ARTESIA YESO CTB BATTERY

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

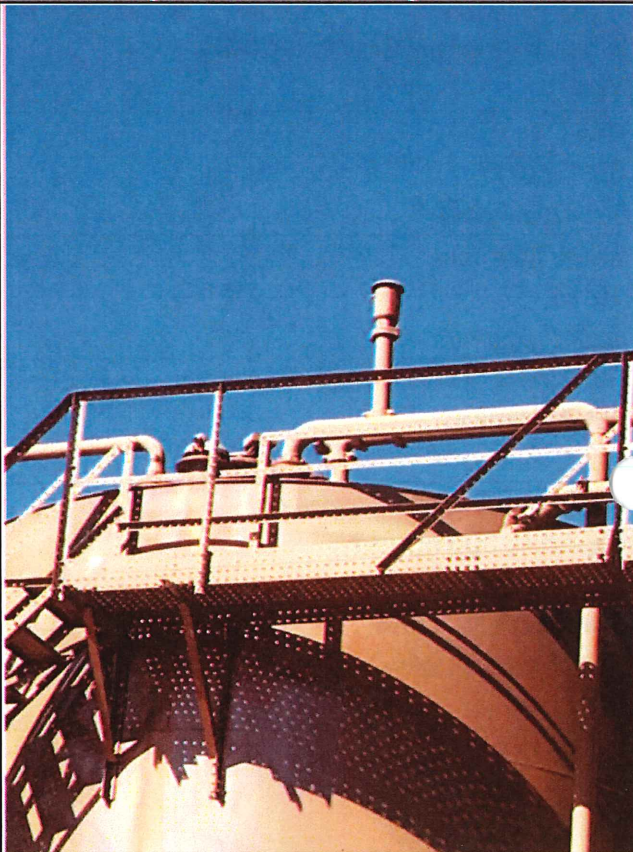
Yes

60.5420a(b)(7)(vii) & (viii)



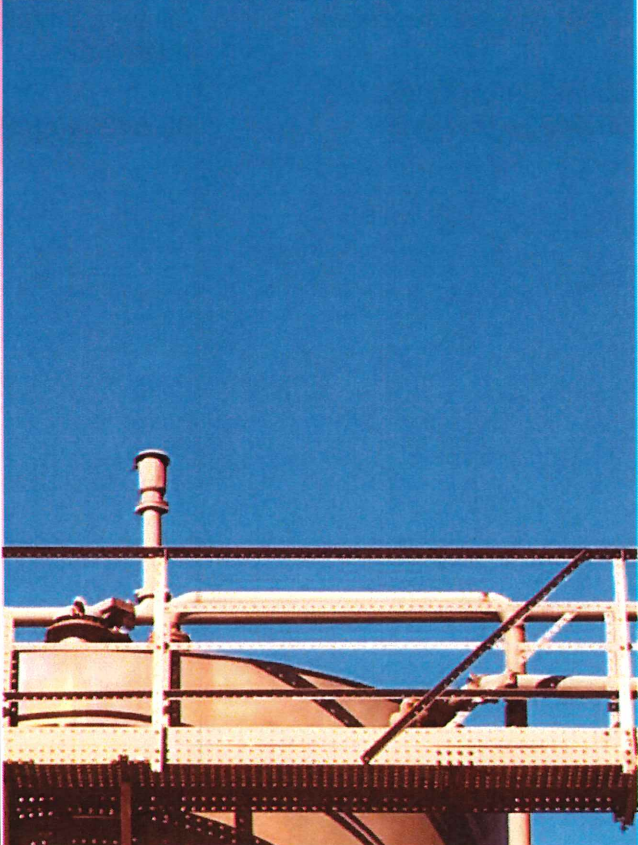
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Other (please describe) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 tank pressure relief vent 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

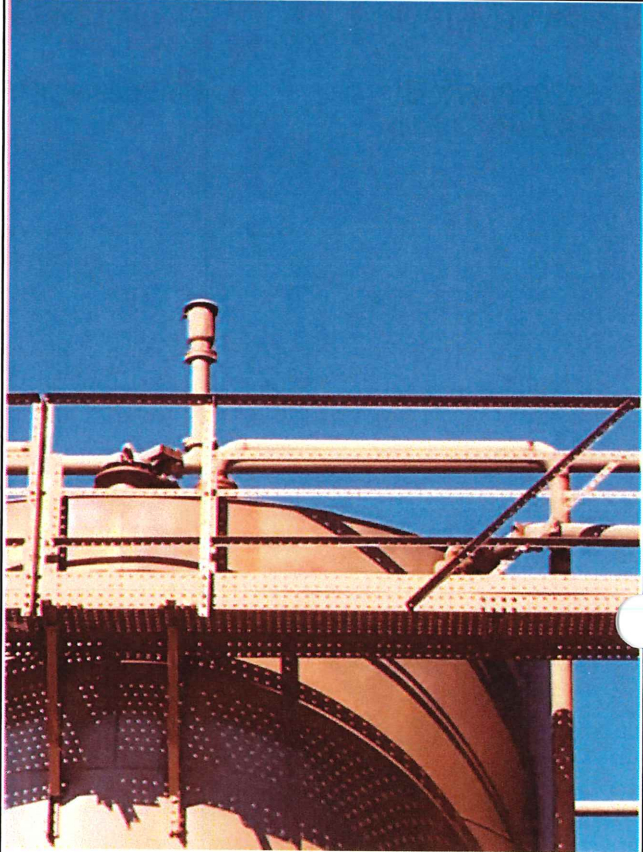


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

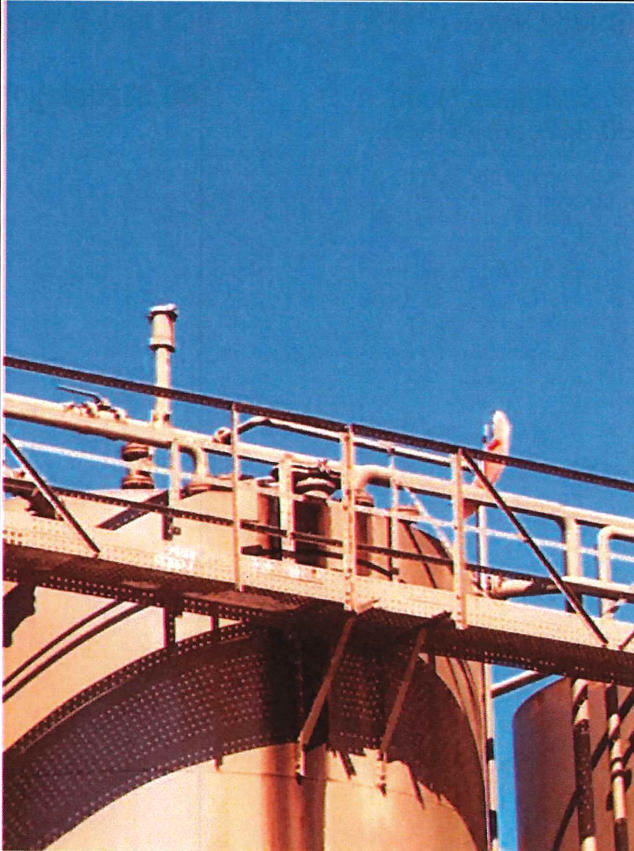


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Other (please describe) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 tank pressure relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

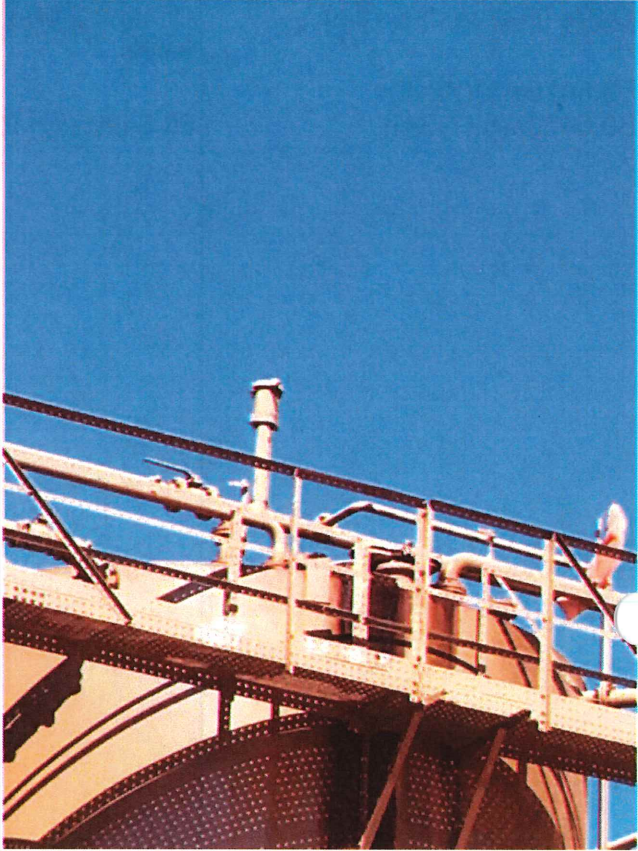


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Other (please describe) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 pressure relief valve 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

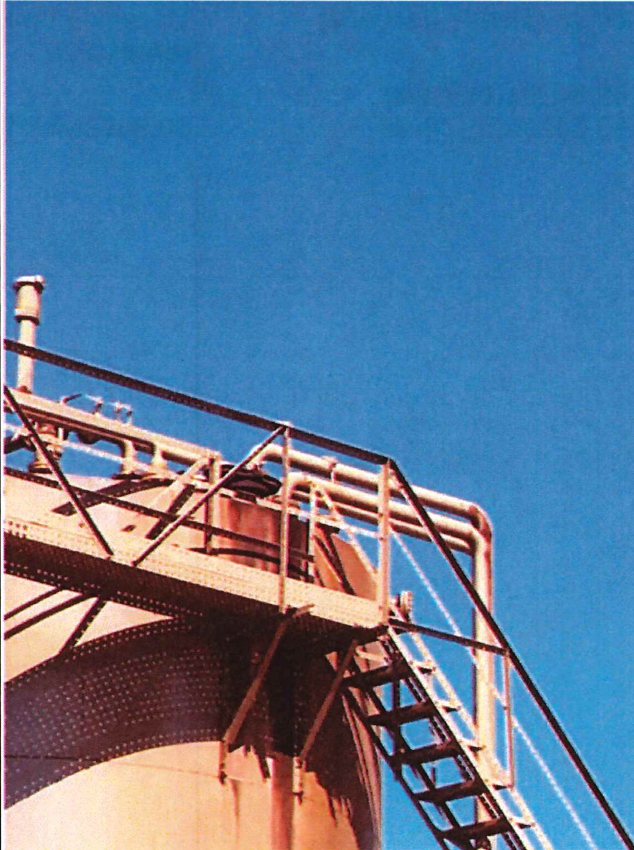


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

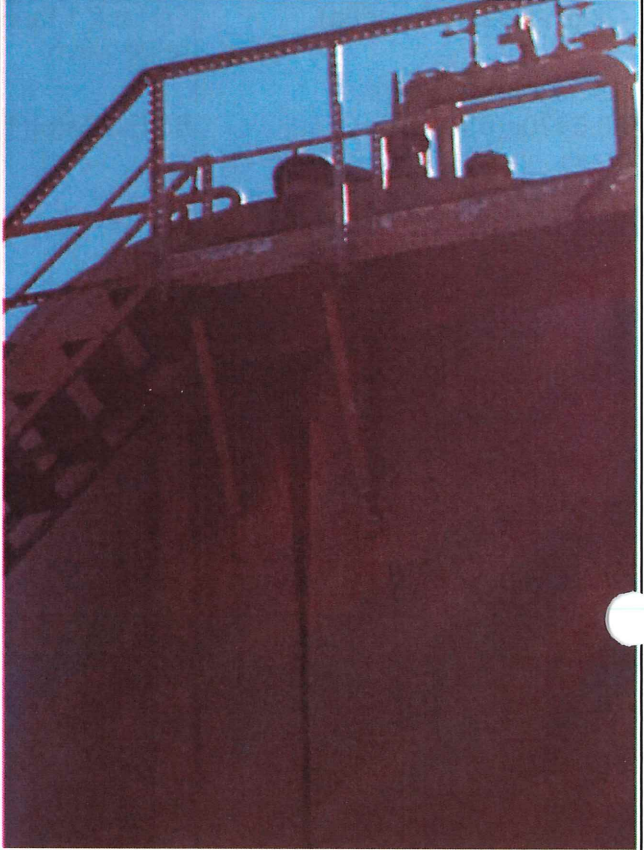


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Other (please describe) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 tank pressure relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Other (please describe) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 5 tank pressure relief valve 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Survey Conditions

Max Wind Speed (MPH)

8

60.5420a(b)(7)(iv)

Sky Conditions

Partly Cloudy / Partly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

53

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

- ☐ Adequate thermal background was not present to observe potential leaks. Resurvey required
- ☐ Could not able to stay within the appropait viewing distance from equipment. Resurvey required
- ☐ Could not overcome adverse monitoring conditions to observe potential leaks. Resurvey required
- ☐ Interference prevented potential leaks from being observed. Resurvey required
- ☐ Was not able to perform the daily FLIR camera verification. Resurvey required

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

7.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

7.00

60.5420a(c)(15)(ii)(l)(8)

Survey End Time

10:46

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Cedar Canyon 16-1 Single Well Battery	(b) (6)	03/15/2017	12:32	12:50

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/15/2017

60.5420a(b)(7)(i)

Survey Start Time

12:32

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Cedar Canyon 16-1 Single Well Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

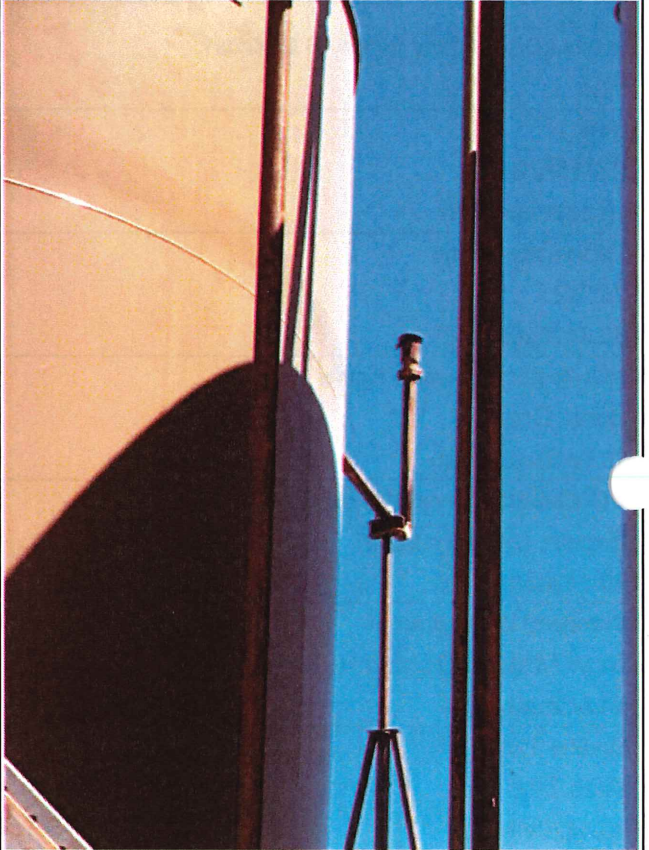
Yes

60.5420a(b)(7)(vii) & (viii)



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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 common tank vent line enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

8

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

79

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

1.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

1.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

12:50

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Cedar Canyon 21 Federal 1 Ctb Battery	(b) (6)	03/15/2017	11:25	11:32

Facility Information

Is this LDAR survey for NSPS 0000a?

Yes

Date

03/15/2017

60.5420a(b)(7)(i)

Survey Start Time

11:25

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Cedar Canyon 21 Federal 1 Ctb Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

8

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

62

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

11:32

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
CEDAR CANYON 22 CENTRAL SATELLITE	(b) (6)	03/15/2017	08:51	09:41

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/15/2017

60.5420a(b)(7)(i)

Survey Start Time

08:51

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (\geq 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

CEDAR CANYON 22 CENTRAL SATELLITE

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

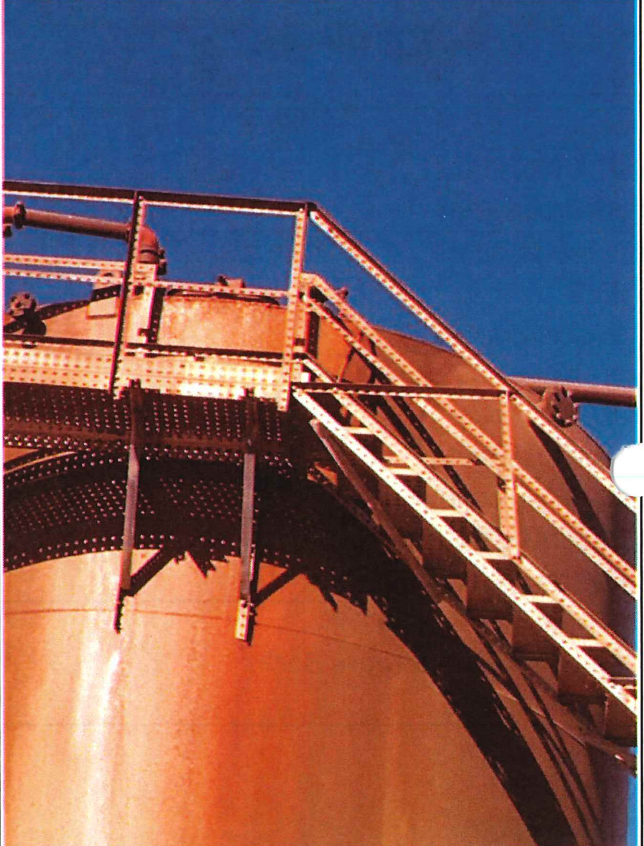
Yes

60.5420a(b)(7)(vii) & (viii)



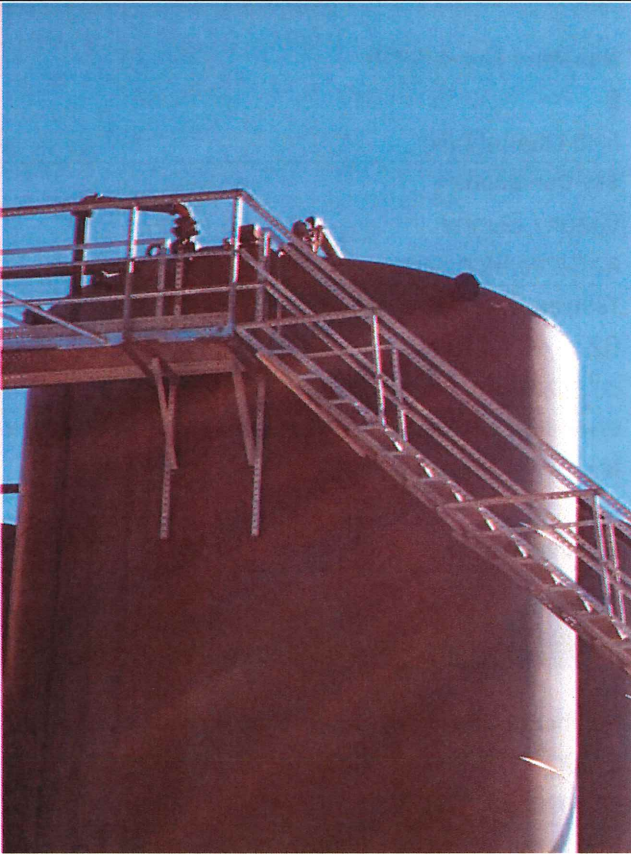
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Field Applications Team
6001 Deauville Blvd.
Midland, TX 79706

Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank S/N 37286 tank #73006408-1 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank S/N 37285 tank #73006408-7 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

6

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

62

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

2.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

2.00

60.5420a(c)(15)(ii)(l)(8)

Survey End Time

09:41

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Cedar Canyon 22 #1 Single Well Battery	(b) (6)	03/15/2017	09:47	10:27

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/15/2017

60.5420a(b)(7)(i)

Survey Start Time

09:47

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Cedar Canyon 22 #1 Single Well Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

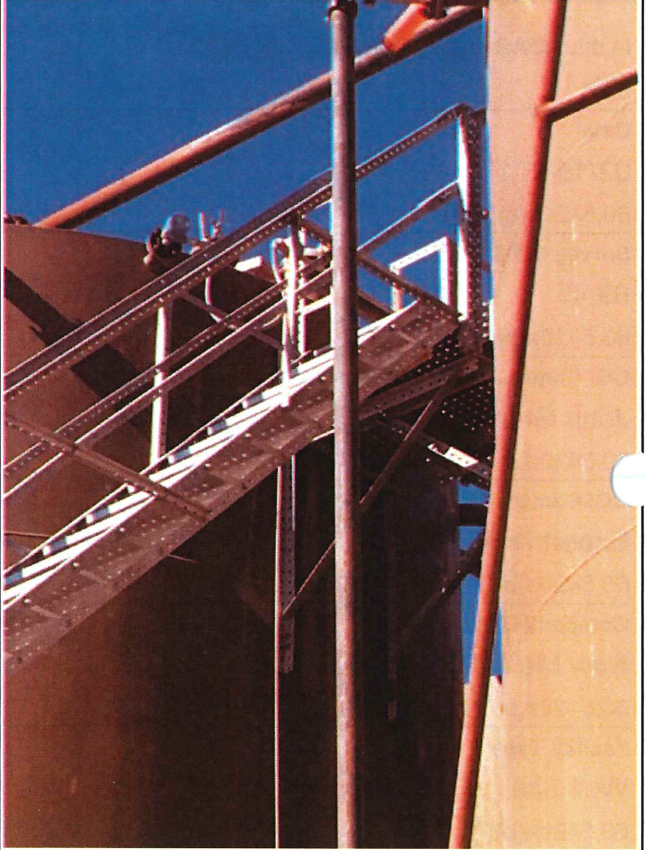
Yes

60.5420a(b)(7)(vii) & (viii)



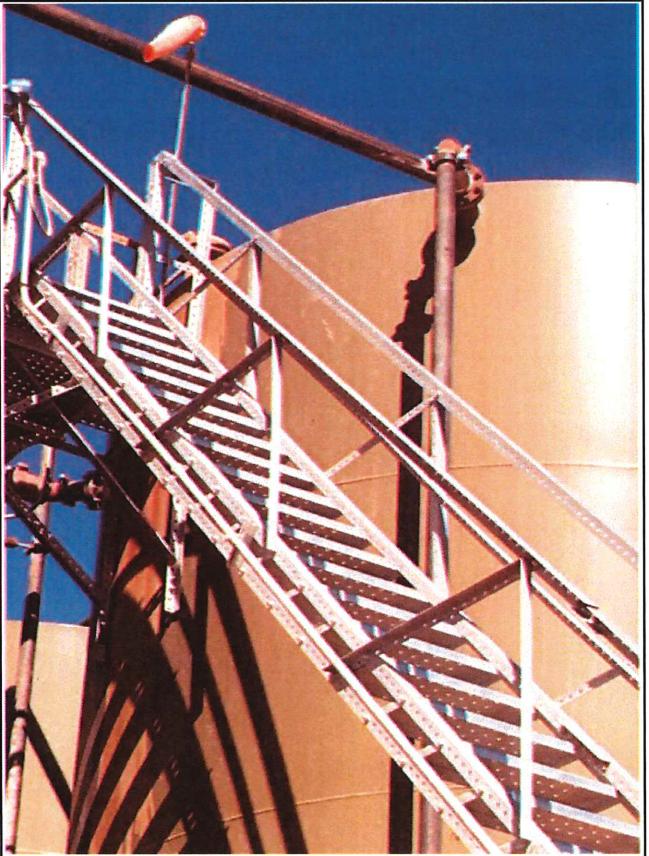
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

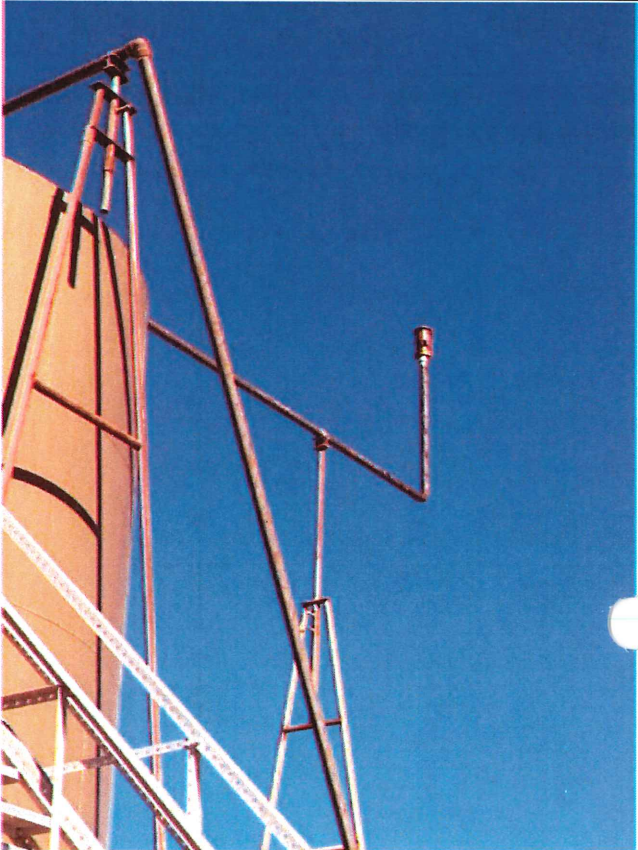


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 6 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

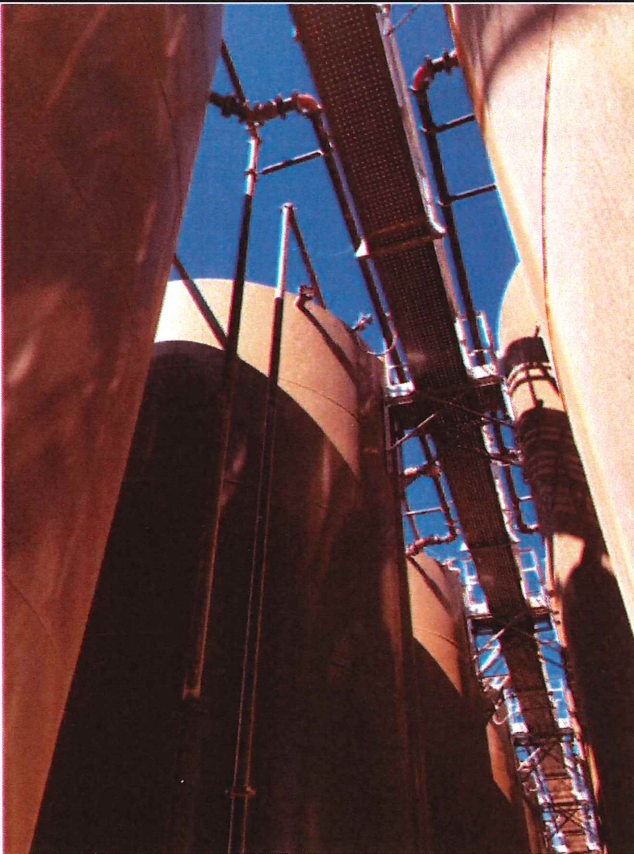


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 6 common tank vent line enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

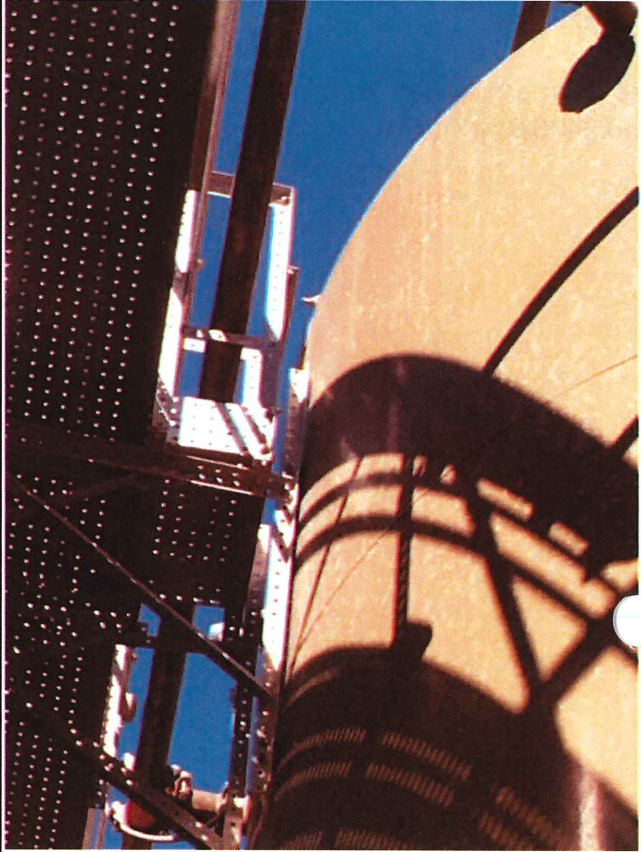


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

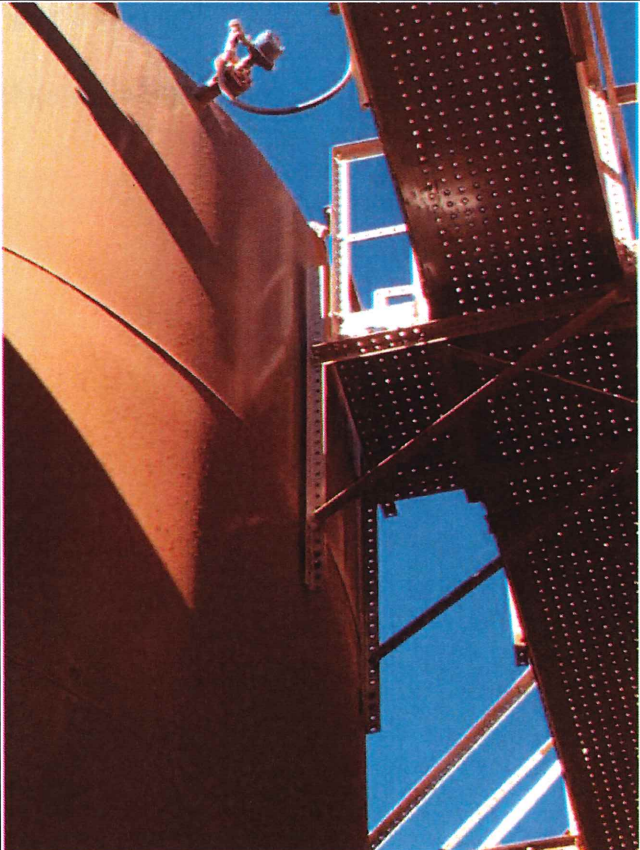


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 5 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

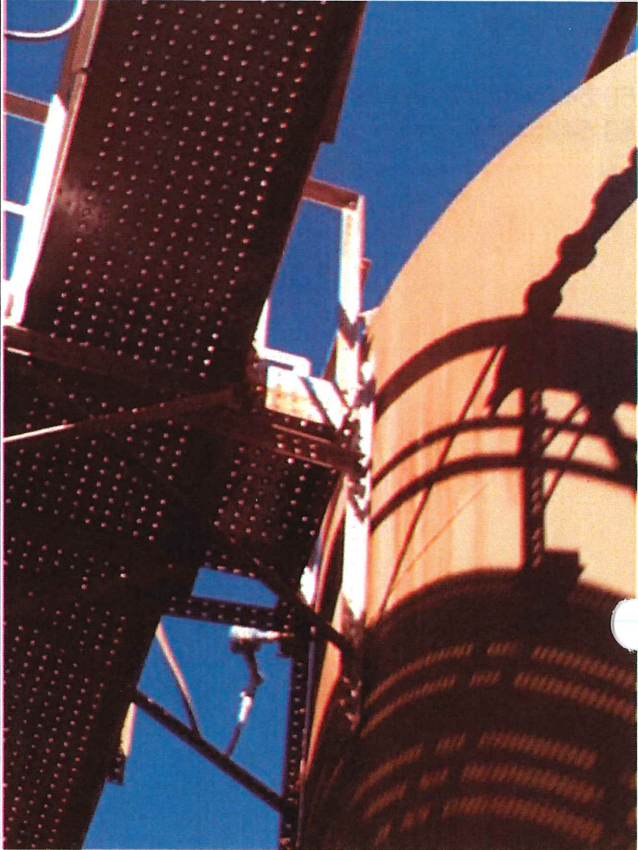


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Survey Conditions

Max Wind Speed (MPH)

8

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

62

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

7.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

7.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

10:27

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
CEDAR CANYON 23-2 CTB BATTERY	(b) (6)	03/27/2017	08:59	09:24

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/27/2017

60.5420a(b)(7)(i)

Survey Start Time

08:59

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

60.5420a(b)(7)

Facility Type

60.5420a(b)(7)

Facility

CEDAR CANYON 23-2 CTB BATTERY

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

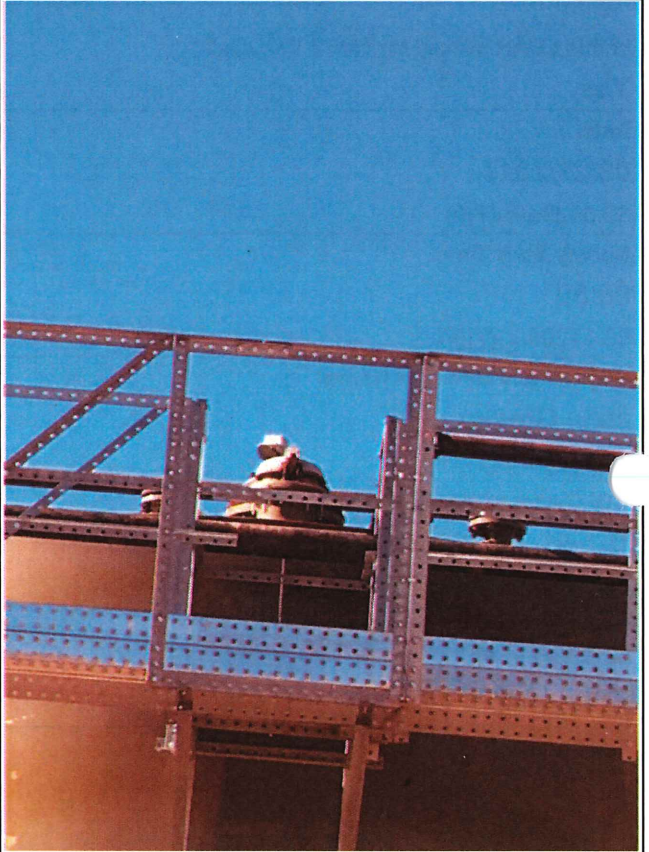
Yes

60.5420a(b)(7)(vii) & (viii)



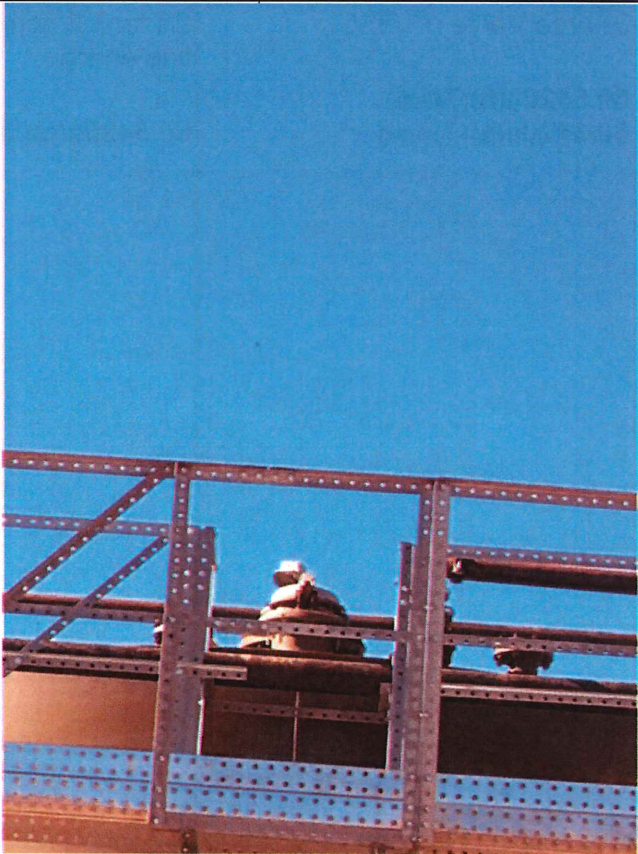
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)




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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 tank safety relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 common vent line enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

5

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

60

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

3.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

3.00

60.5420a(c)(15)(ii)(l)(8)

Survey End Time

09:24

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
CEDAR CANYON 28 CTB BATTERY	(b) (6)	03/20/2017	11:48	12:35

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/20/2017

60.5420a(b)(7)(i)

Survey Start Time

11:48

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

CEDAR CANYON 28 CTB BATTERY

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

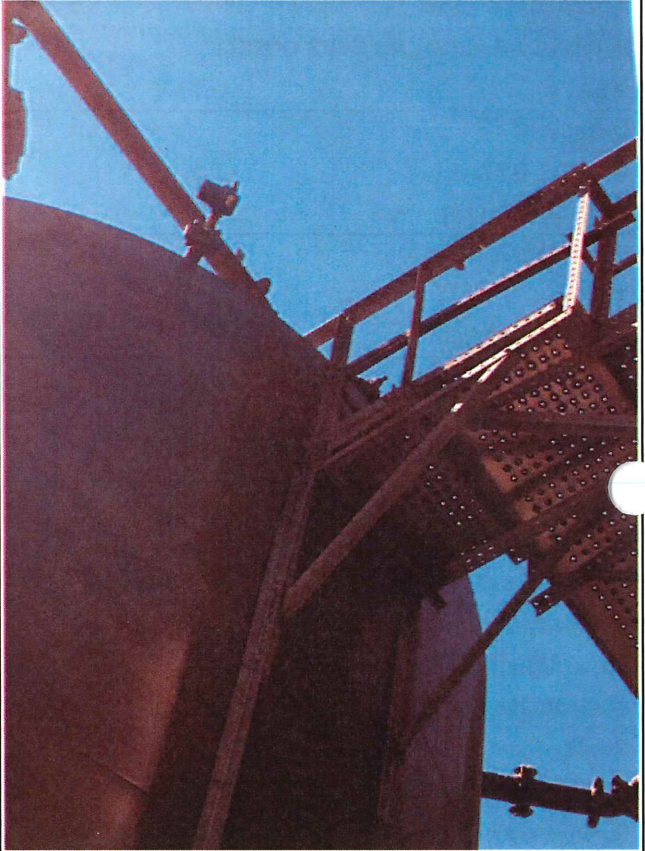
Yes

60.5420a(b)(7)(vii) & (viii)



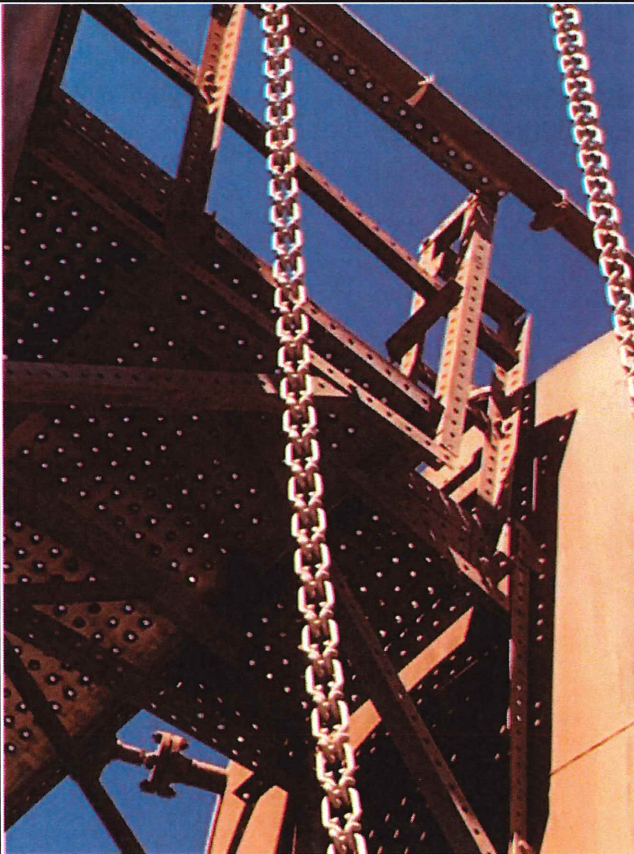
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Field Applications Team
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank S/N 11305 south east thief hatch or tank relief 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

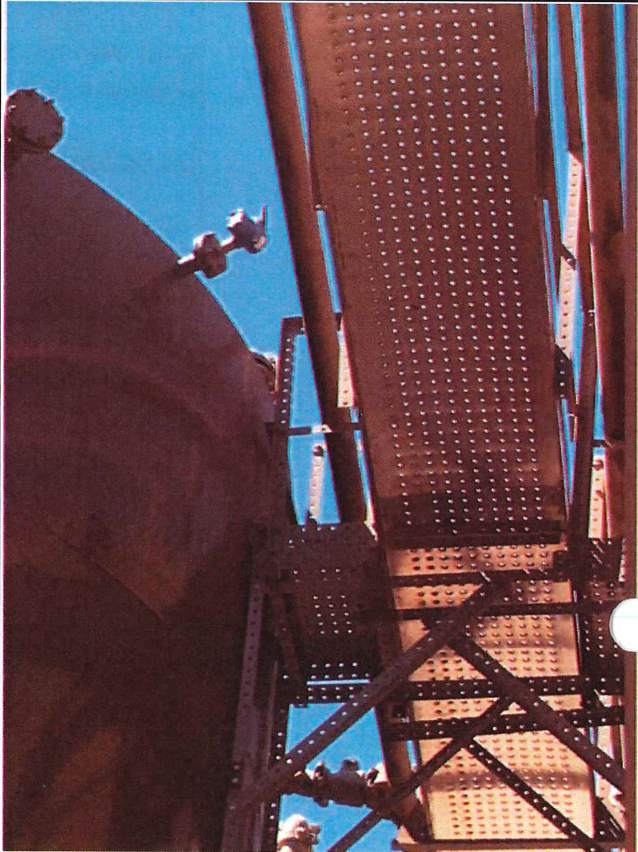


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank S/N 11303 north east thief hatch or tank pressure relief 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

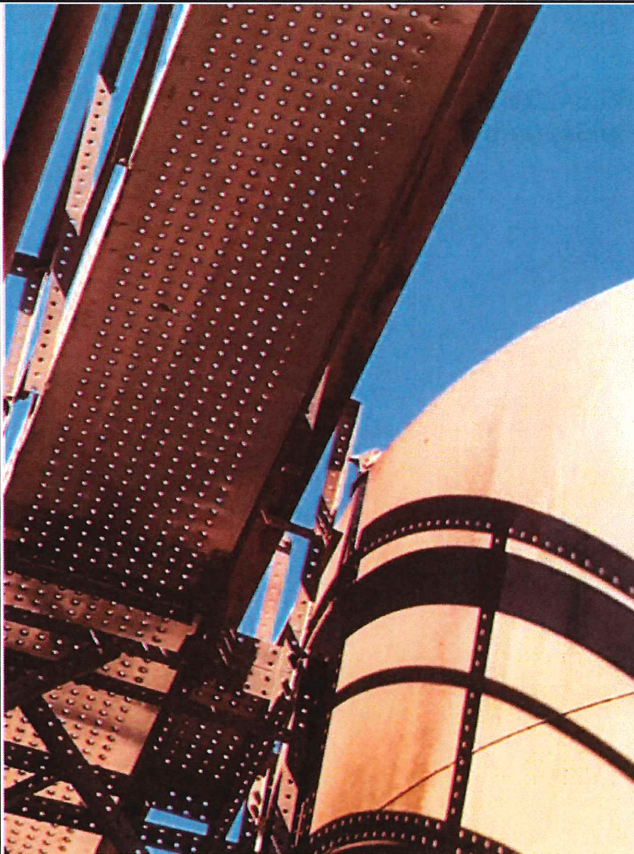


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank south middle thief hatch or tank pressure relief vent 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

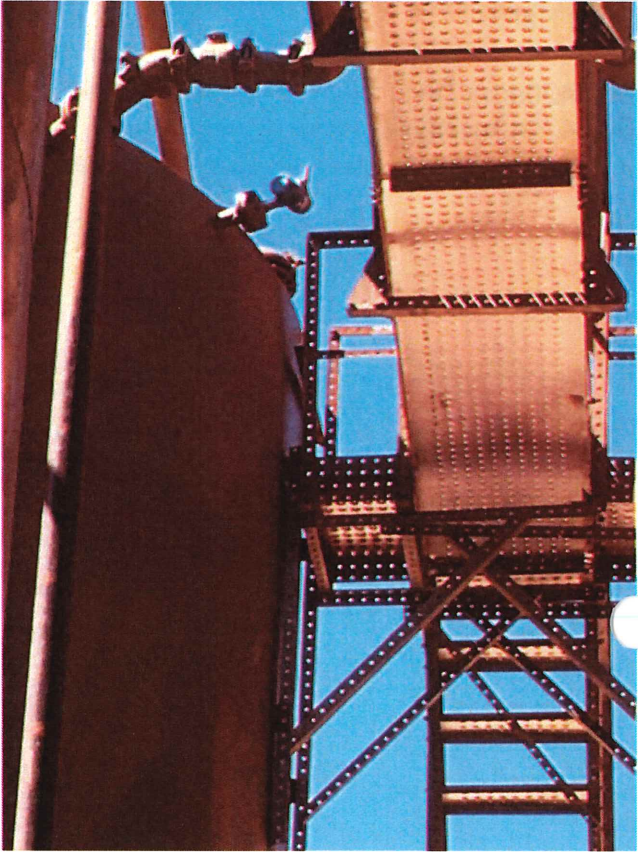


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank north middle thief hatch or tank pressure relief vent 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

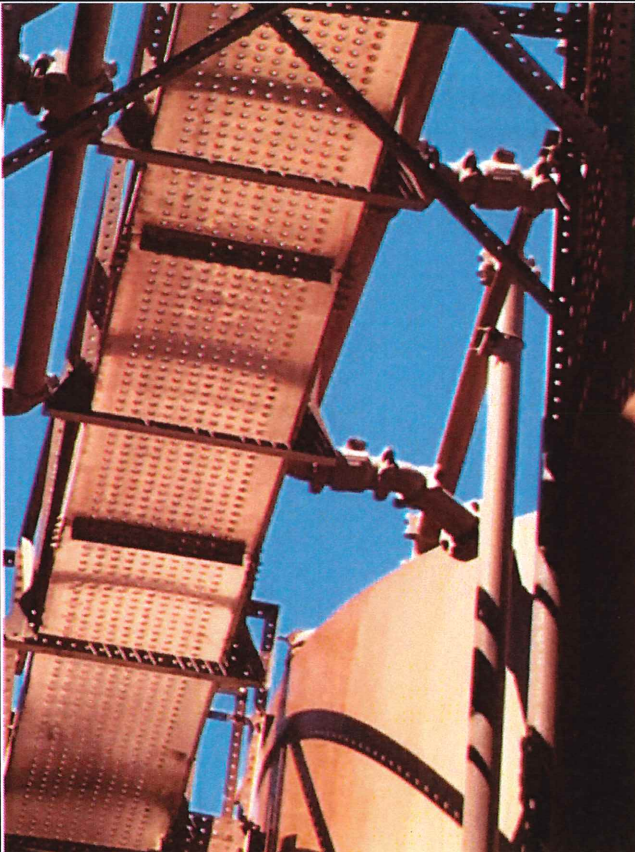


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank south west thief hatch or tank pressure relief vent 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

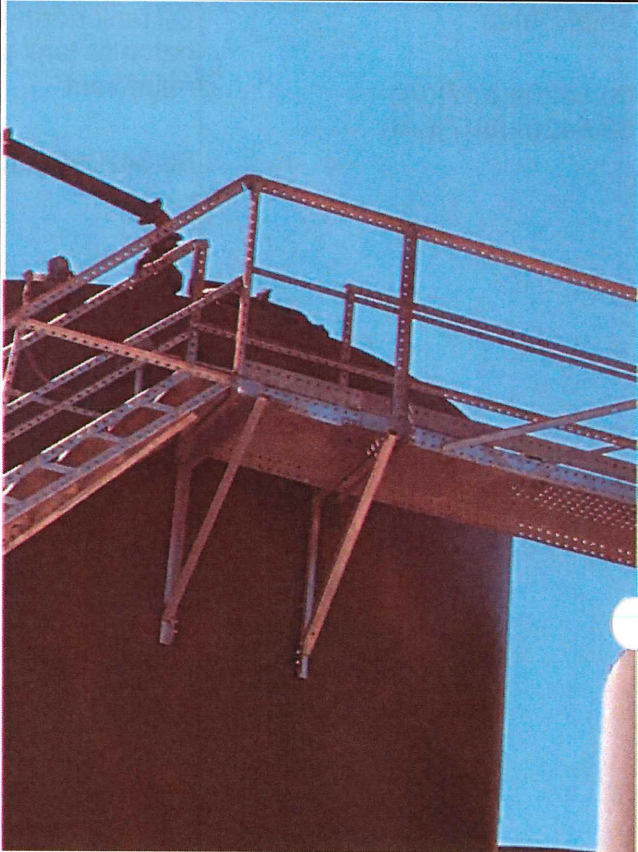


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank north west thief hatch or tank pressure relief vent 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

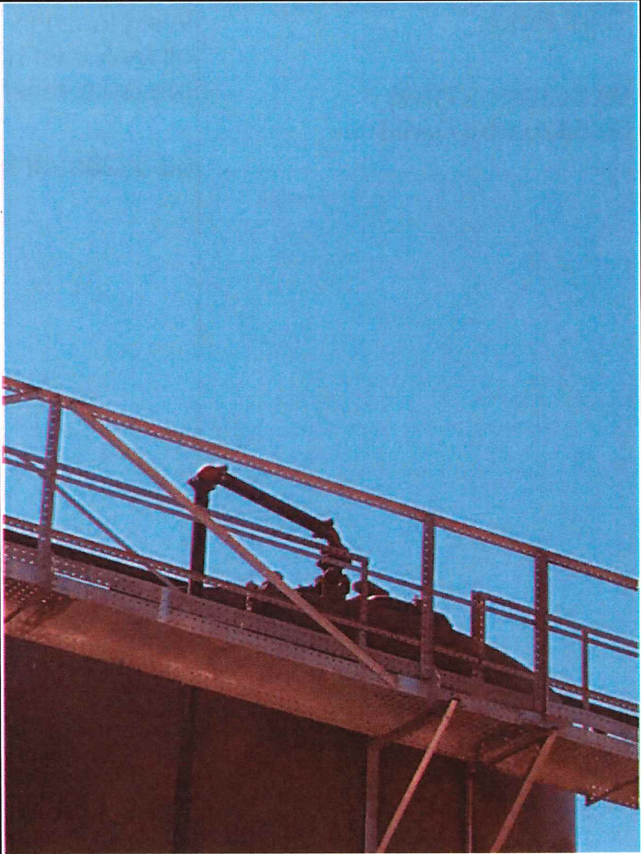


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	West tank location oil tank S/N 27281 north east tank thief hatch or tank pressure relief vent 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

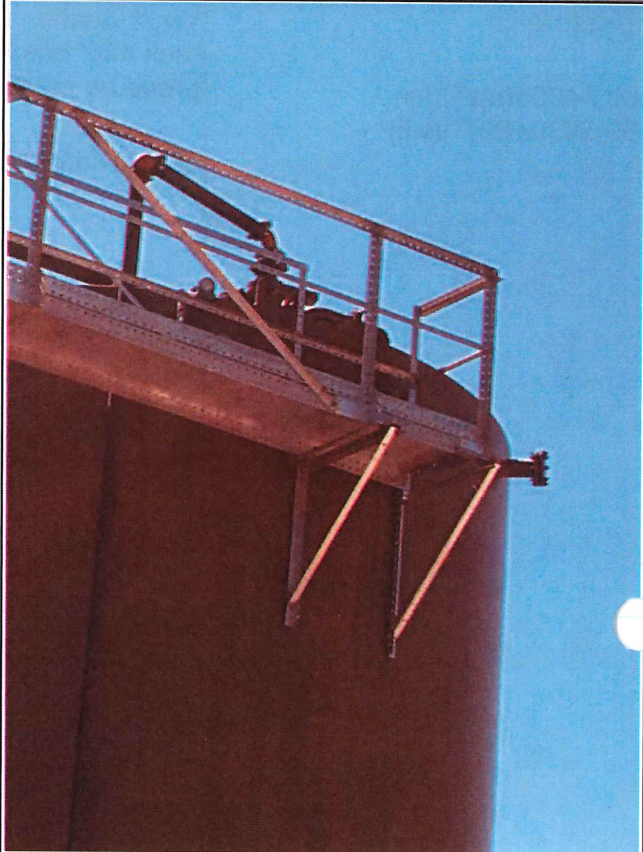


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	West location middle oil tank thief hatch or tank pressure relief vent 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	West location north west oil tank thief hatch or tank pressure relief vent 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

7

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

90

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

9.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

9.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

12:35

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Cedar Canyon 28 Federal 4 Swd Battery	(b) (6)	03/20/2017	12:36	12:39

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/20/2017

60.5420a(b)(7)(i)

Survey Start Time

12:36

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Cedar Canyon 28 Federal 4 Swd Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

7

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

90

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

12:39

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Christopher Federal 2 Ctb Battery	(b) (6)	03/08/2017	09:44	10:07

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/08/2017

60.5420a(b)(7)(i)

Survey Start Time

09:44

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (\geq 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Christopher Federal 2 Ctb Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



OXY USA Inc.
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Survey Conditions

Max Wind Speed (MPH)

4

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

68

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

10:07

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
COPPERHEAD 18 STATE 1 BATTERY AND SWD	(b) (6)	04/03/2017	13:40	14:07

Facility Information

Is this LDAR survey for NSPS 0000a?

Yes

Date

04/03/2017

60.5420a(b)(7)(i)

Survey Start Time

13:40

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

COPPERHEAD 18 STATE 1 BATTERY AND SWD

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

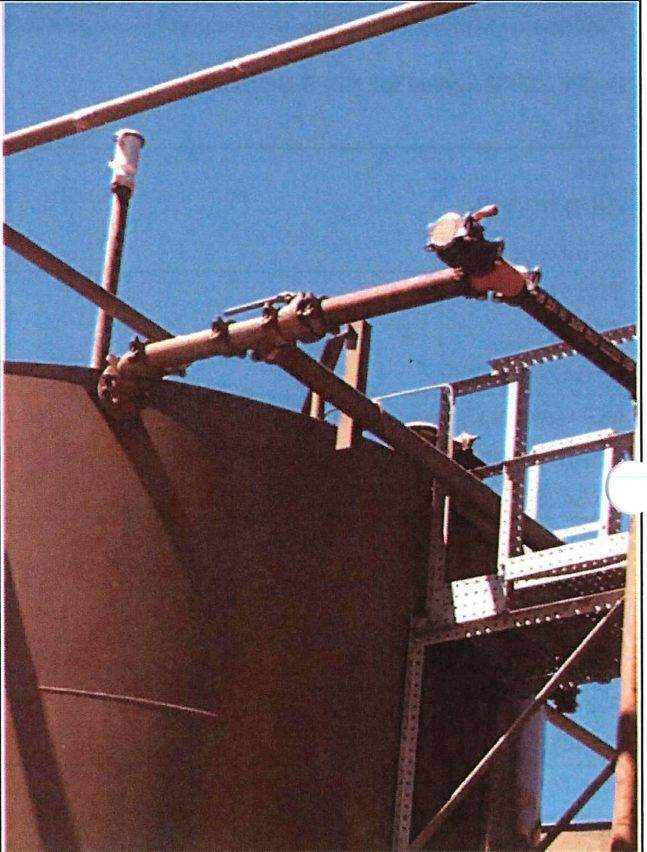
Yes

60.5420a(b)(7)(vii) & (viii)



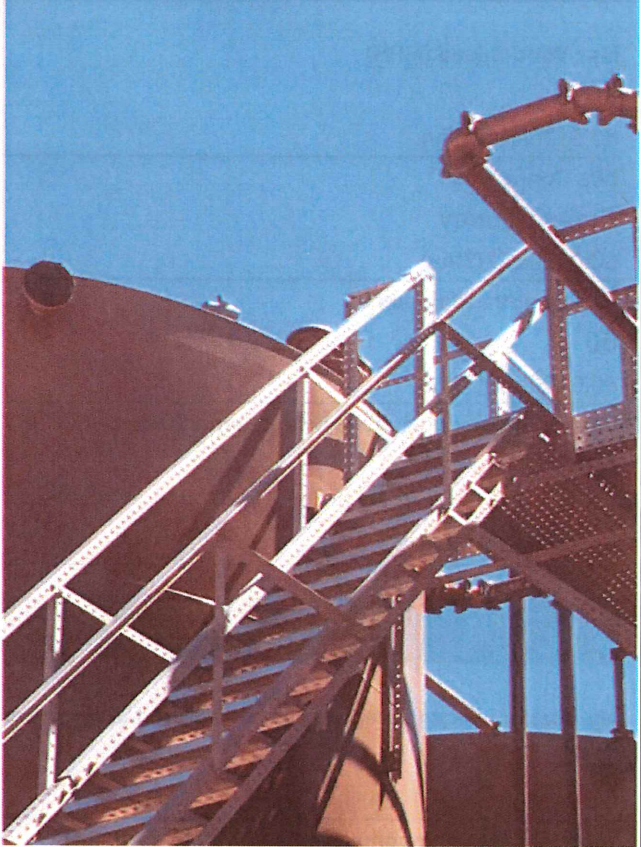
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Field Applications Team
6001 Deauville Blvd.
Midland, TX 79706

Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank right behind oil tank 3 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

14

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

80

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

2.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

2.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

14:07

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
CYPRESS 34 FEDERAL 1 CTB BATTERY	(b) (6)	04/03/2017	09:15	09:49

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

04/03/2017

60.5420a(b)(7)(i)

Survey Start Time

09:15

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

CYPRESS 34 FEDERAL 1 CTB BATTERY

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

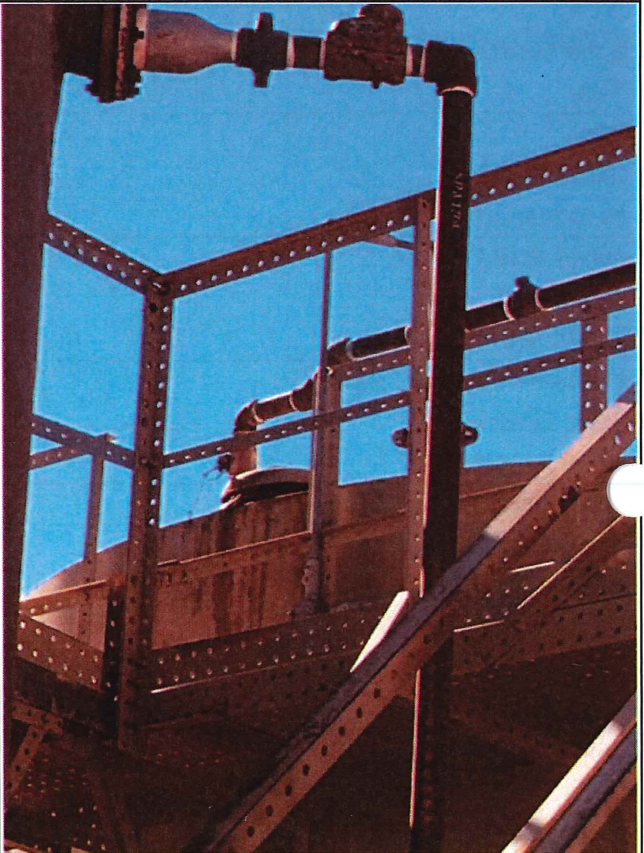
Yes

60.5420a(b)(7)(vii) & (viii)



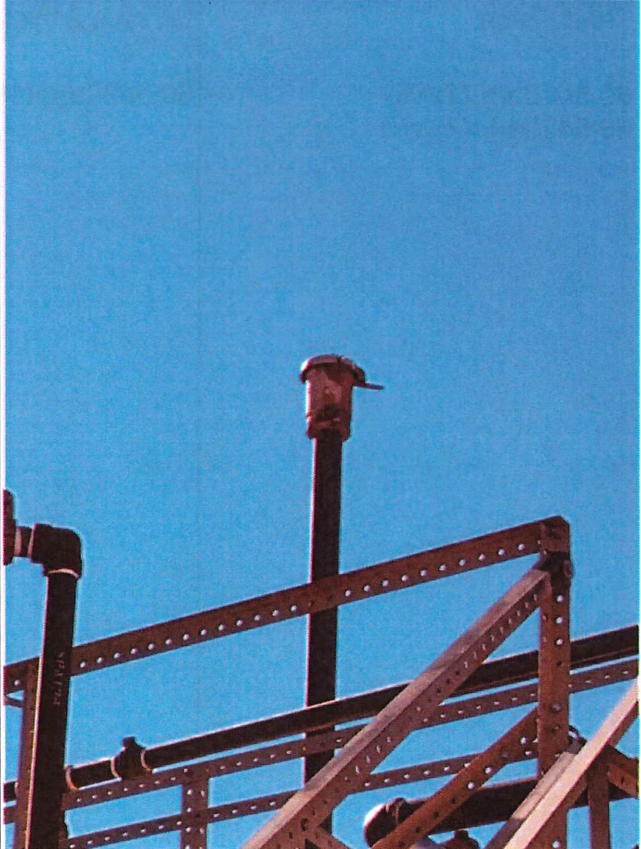
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6001 Deauville Blvd.
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 (135432-1) east tank thief hatch. 60.5420a(c)(15)(ii)(l)(8)	 <p>60.5420a(c)(15)(ii)(l)(8)</p>

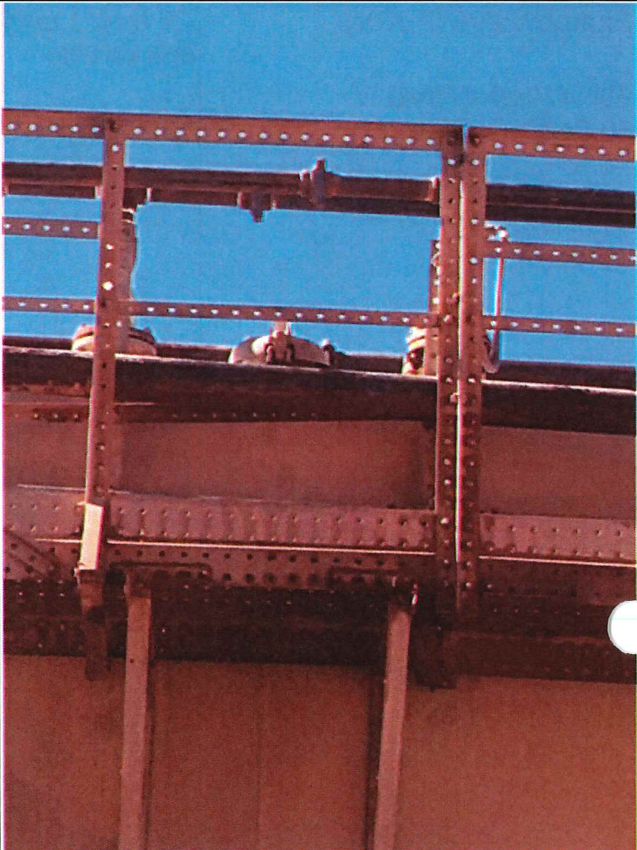


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 common vent line enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

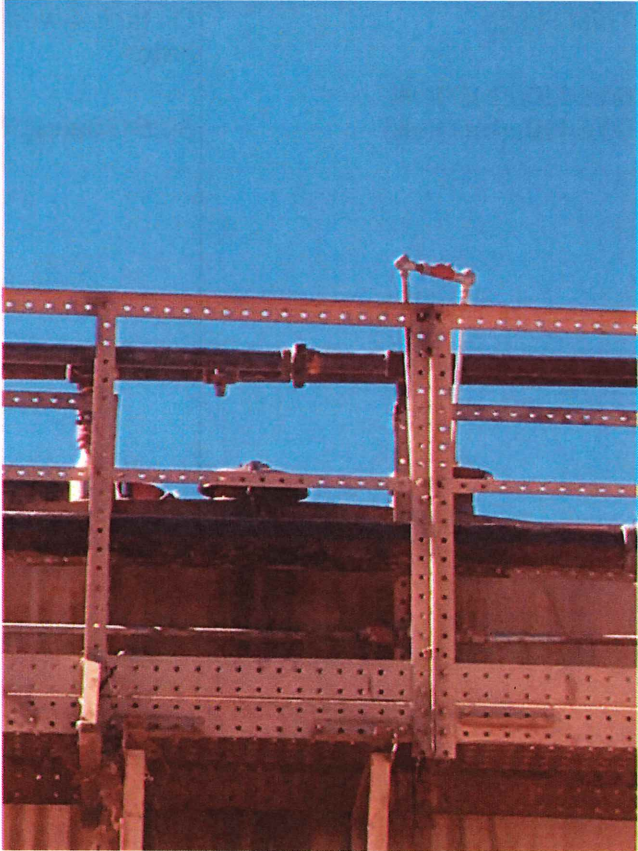


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

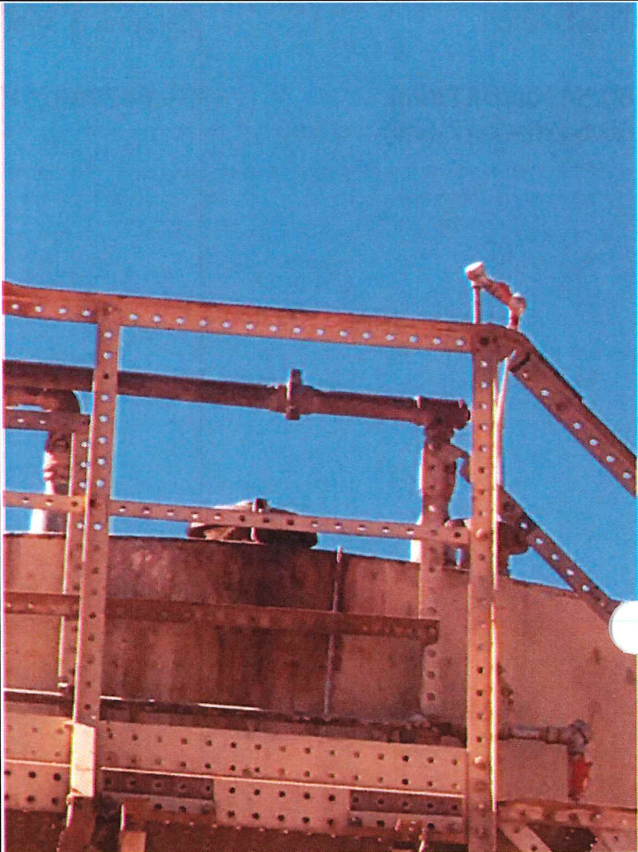


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 west tank thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Survey Conditions

Max Wind Speed (MPH)

9

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

74

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

5.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

5.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

09:49

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Dwu Federal 6 Single Well Battery	(b) (6)	03/06/2017	09:26	09:41

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/06/2017

60.5420a(b)(7)(i)

Survey Start Time

09:26

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (\geq 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Dwu Federal 6 Single Well Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

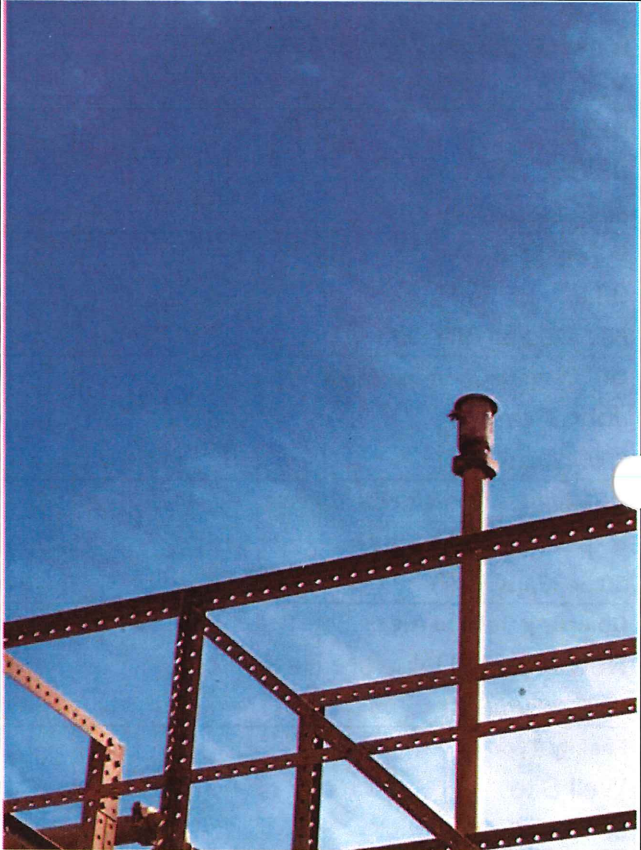
Yes

60.5420a(b)(7)(vii) & (viii)



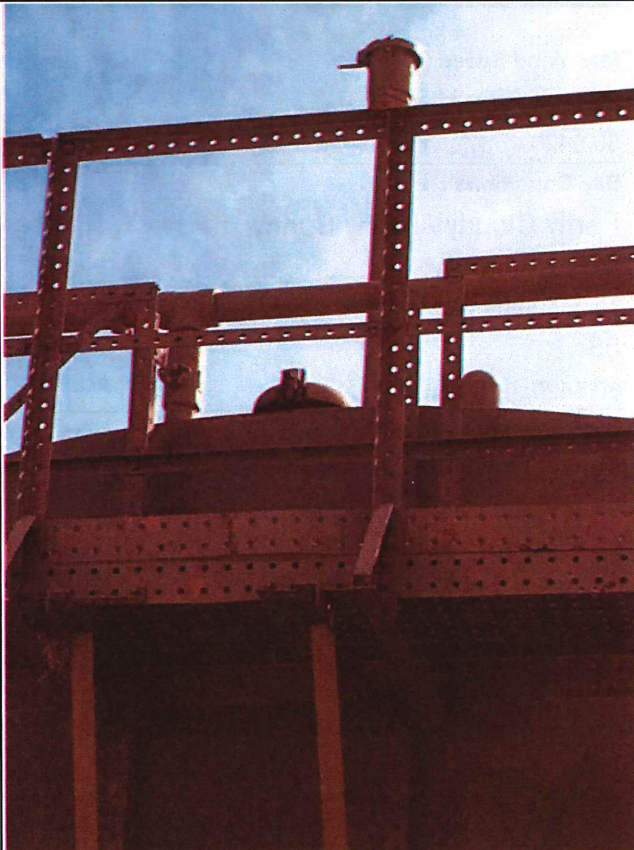
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	PW tank enardo leaking 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank MI 303766 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Survey Conditions

Max Wind Speed (MPH)

25

60.5420a(b)(7)(iv)

Sky Conditions

Partly Cloudy / Partly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

68

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

2.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

2.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

09:41

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Elizondo A4 Battery	(b) (6)	04/20/2017	13:13	13:17

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

04/20/2017

60.5420a(b)(7)(i)

Survey Start Time

13:13

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Elizondo A4 Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

13

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

85

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

13:17

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Foxglove Fed 2906H	(b) (6)	06/15/2017	11:43	12:17

Facility Information

Is this LDAR survey for NSPS 0000a?

Yes

Date

06/15/2017

60.5420a(b)(7)(i)

Survey Start Time

11:43

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Foxglove Fed 2906H

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

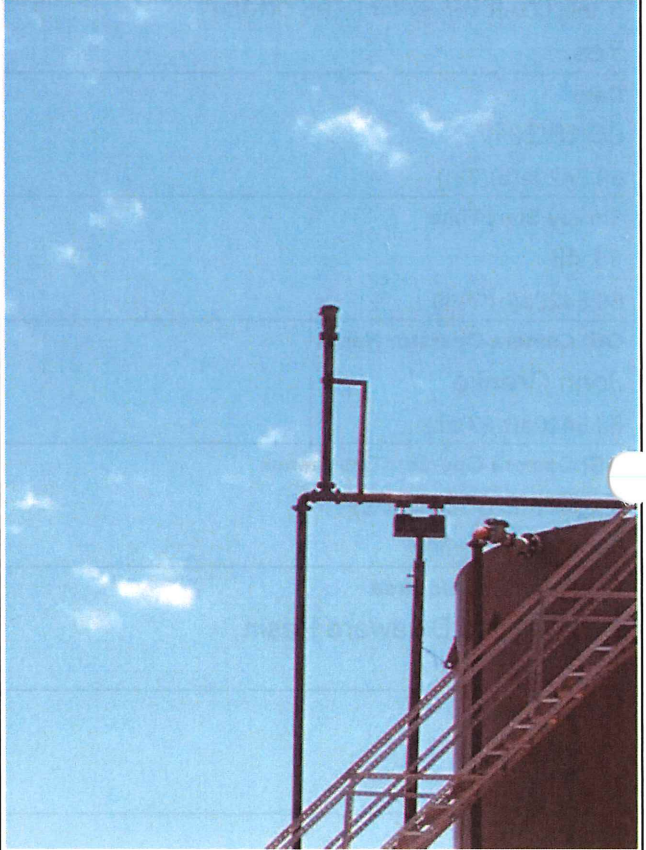
Yes

0.5420a(b)(7)(vii) & (viii)



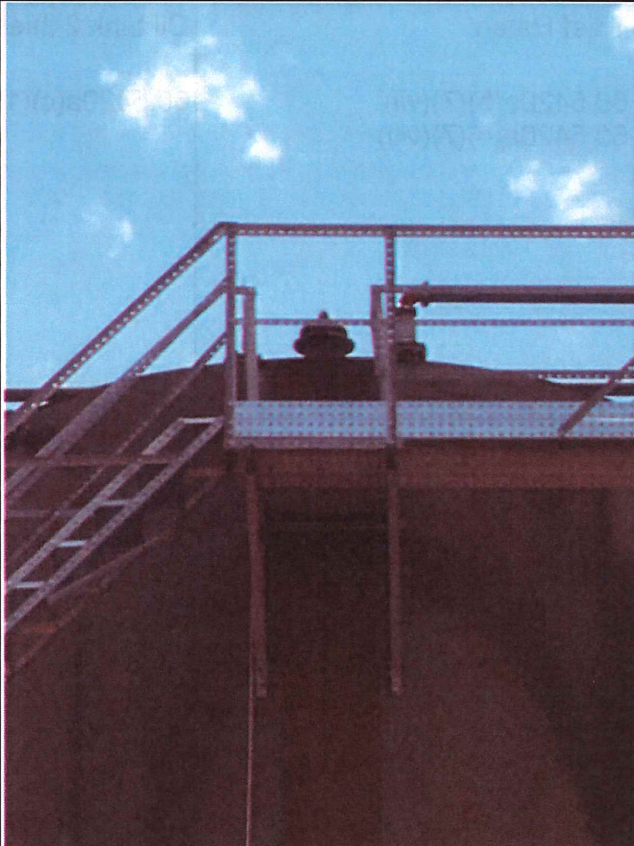
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6001 Deauville Blvd.
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 common tank vent enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

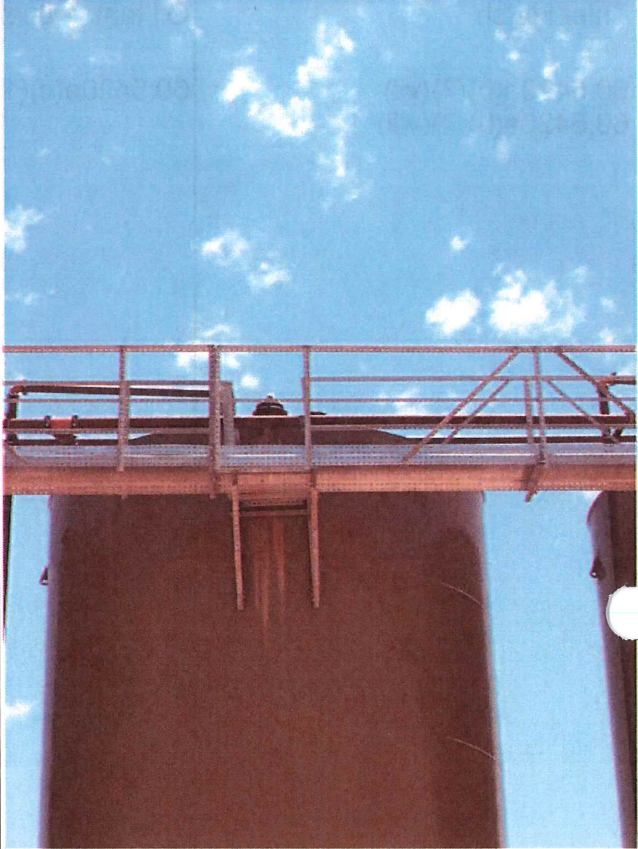


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

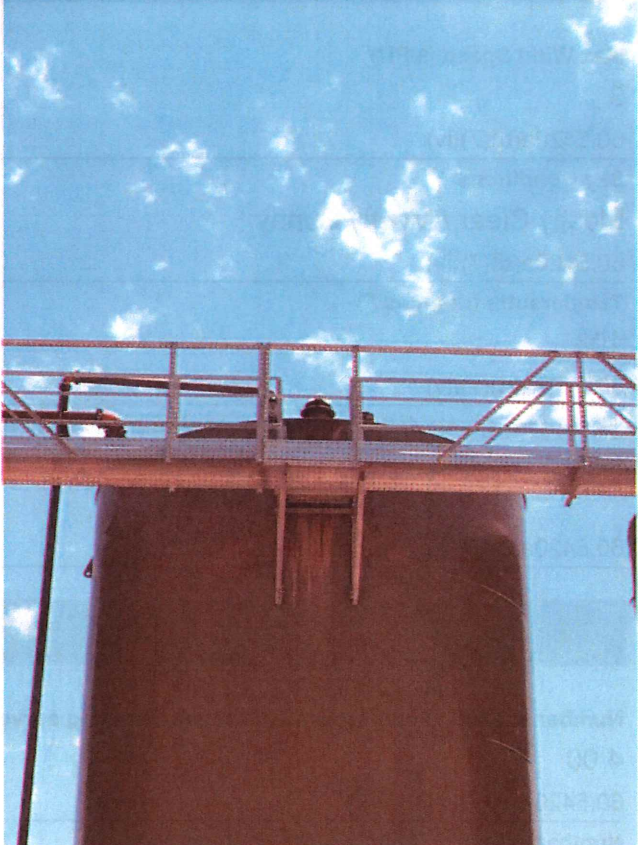


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

3

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

103

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

4.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

4.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

12:17

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Goodnight 35 Federal 2H Well Battery	(b) (6)	04/03/2017	10:03	10:05

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

04/03/2017

60.5420a(b)(7)(i)

Survey Start Time

10:03

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Goodnight 35 Federal 2H Well Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

9

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

74

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

10:05

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
GOVERNMENT AG 01 SINGLE WELL BATTERY	(b) (6)	03/06/2017	08:51	09:06

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/06/2017

60.5420a(b)(7)(i)

Survey Start Time

08:51

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

GOVERNMENT AG 01 SINGLE WELL BATTERY

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

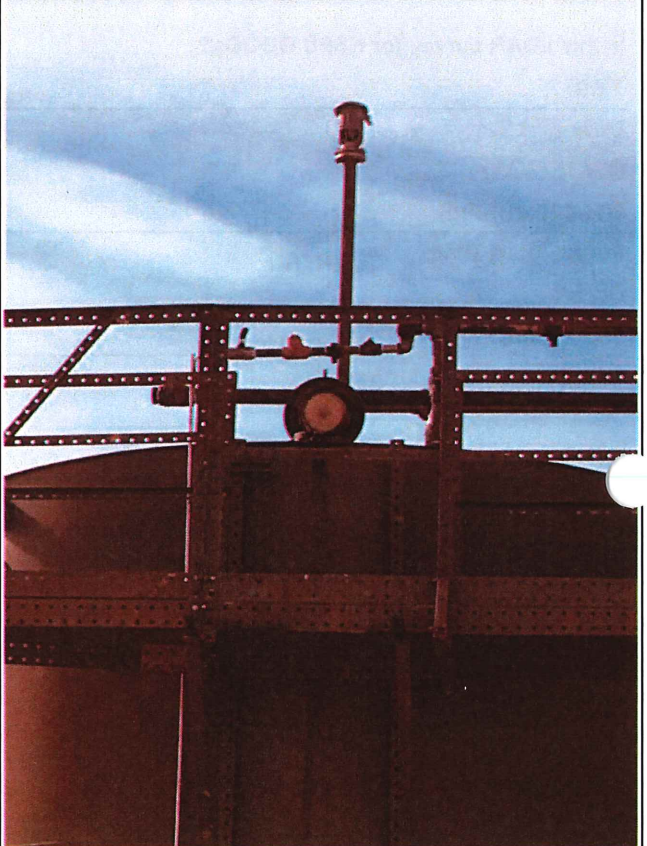
Yes

60.5420a(b)(7)(vii) & (viii)



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Field Applications Team
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank MI 302031 thief hatch open 60.5420a(c)(15)(ii)(l)(8)	 <p>60.5420a(c)(15)(ii)(l)(8)</p>



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Field Applications Team
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Midland, TX 79706

Survey Conditions

Max Wind Speed (MPH)

25

60.5420a(b)(7)(iv)

Sky Conditions

Partly Cloudy / Partly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

65

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

1.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

1.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

09:06

60.5420a(b)(7)(ii)



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Field Applications Team
6001 Deauville Blvd.
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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Harroun 15 8 And 15 Ctb Battery	(b) (6)	03/15/2017	11:43	12:02

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/15/2017

60.5420a(b)(7)(i)

Survey Start Time

11:43

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (\geq 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Harroun 15 8 And 15 Ctb Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

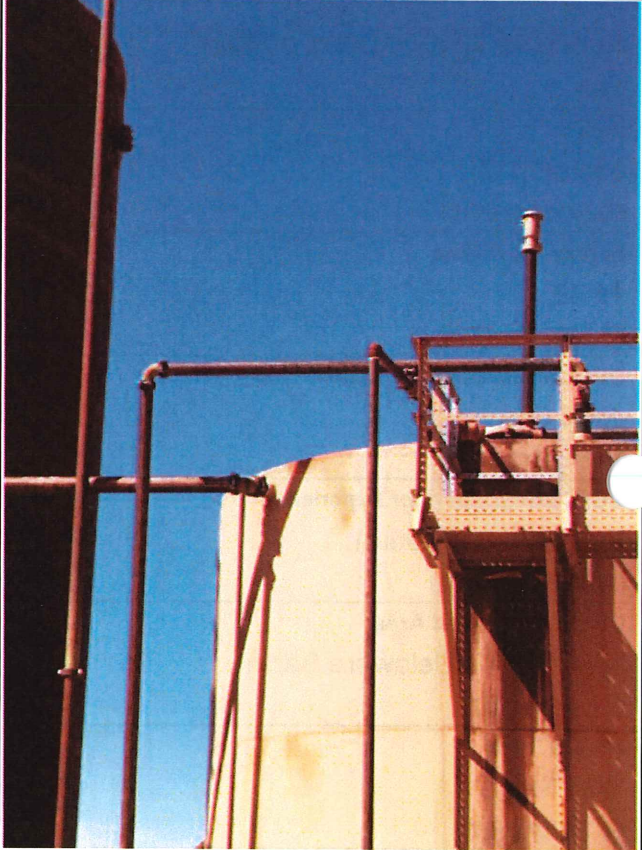
Yes

60.5420a(b)(7)(vii) & (viii)




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Midland, TX 79706

Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 next to PW tank thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

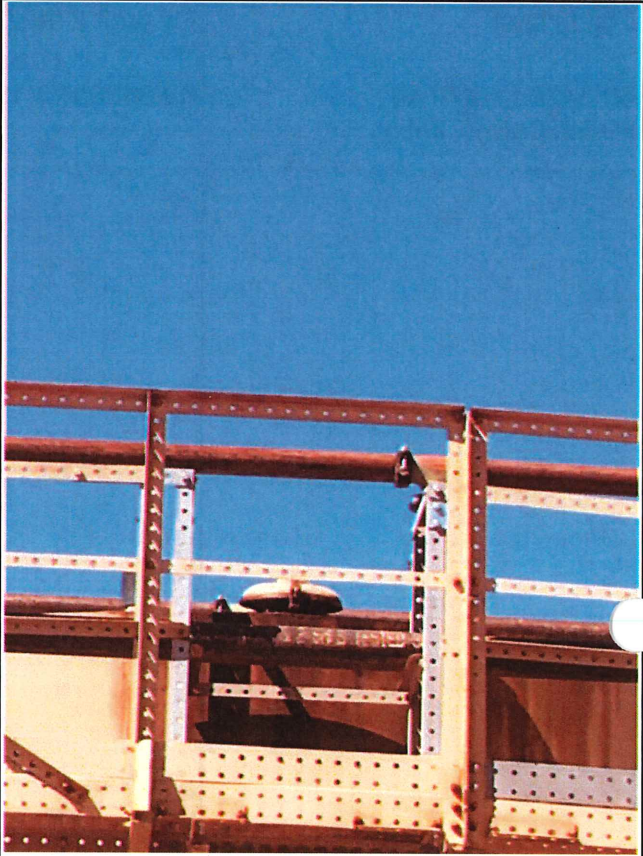


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

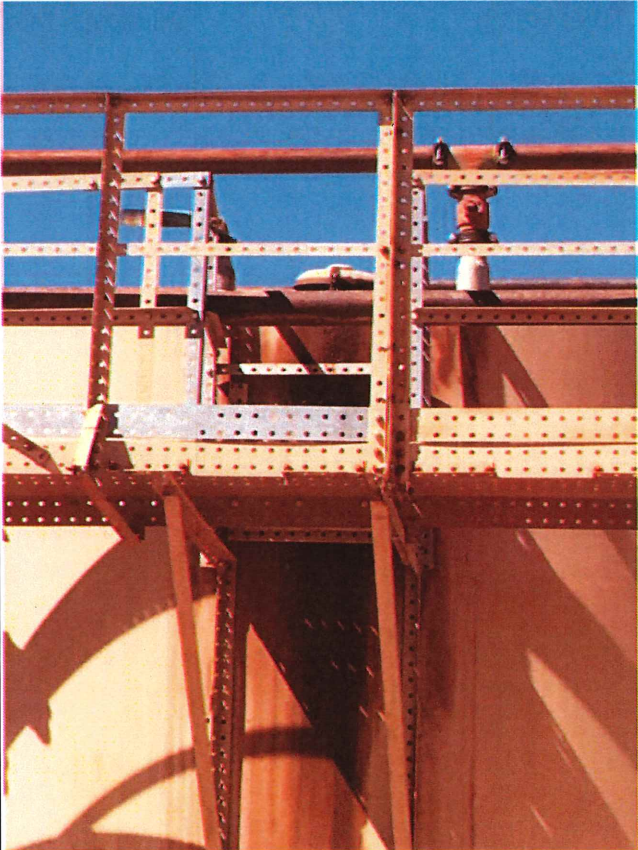


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

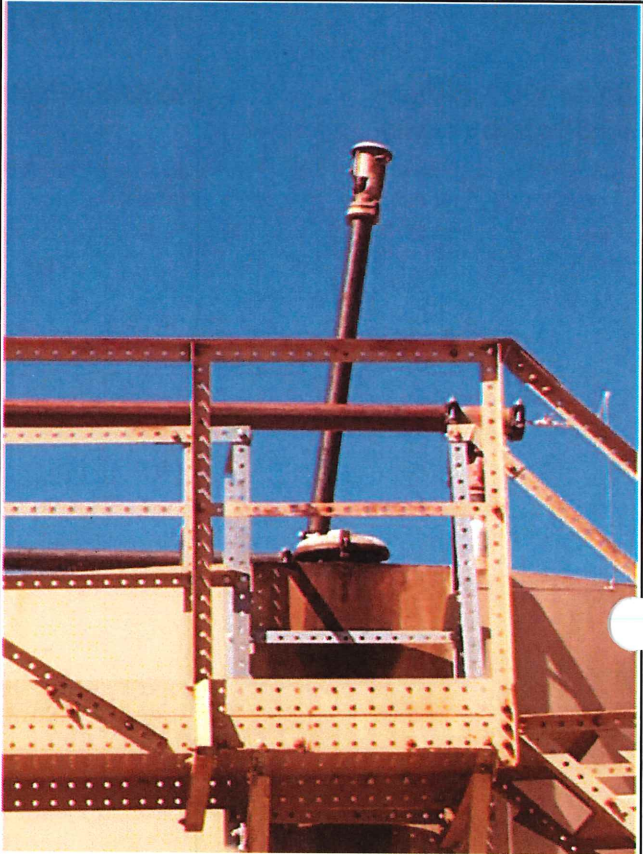


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 5 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

8

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

72

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

5.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

5.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

12:02

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Medicine Man Battery	(b) (6)	04/06/2017	08:50	08:59

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

04/06/2017

60.5420a(b)(7)(i)

Survey Start Time

08:50

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Medicine Man Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

12

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

62

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

08:59

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Misty Ivore Ctb (35 Federal 4H Battery)	(b) (6)	07/24/2017	09:52	10:13

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

07/24/2017

60.5420a(b)(7)(i)

Survey Start Time

09:52

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Misty Ivore Ctb (35 Federal 4H Battery)

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

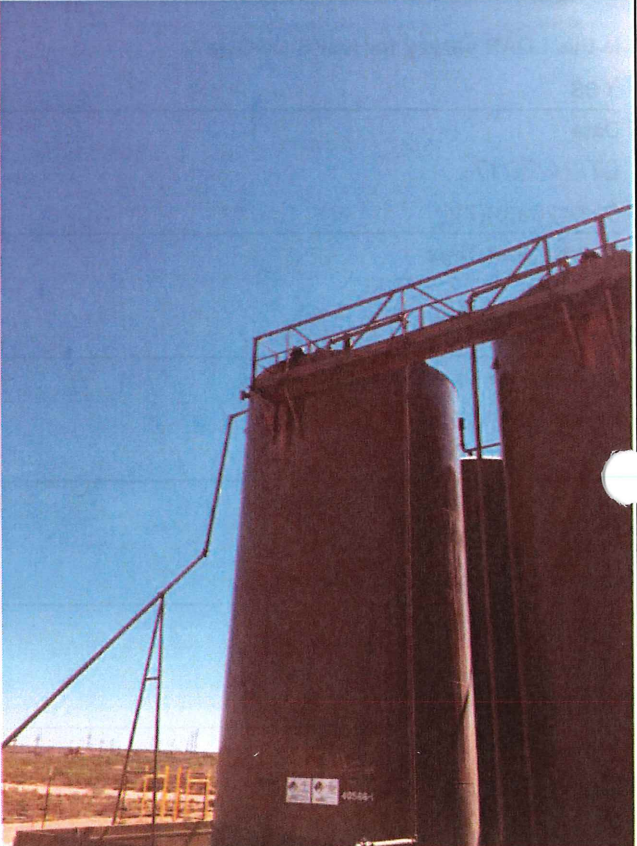
Yes

60.5420a(b)(7)(vii) & (viii)



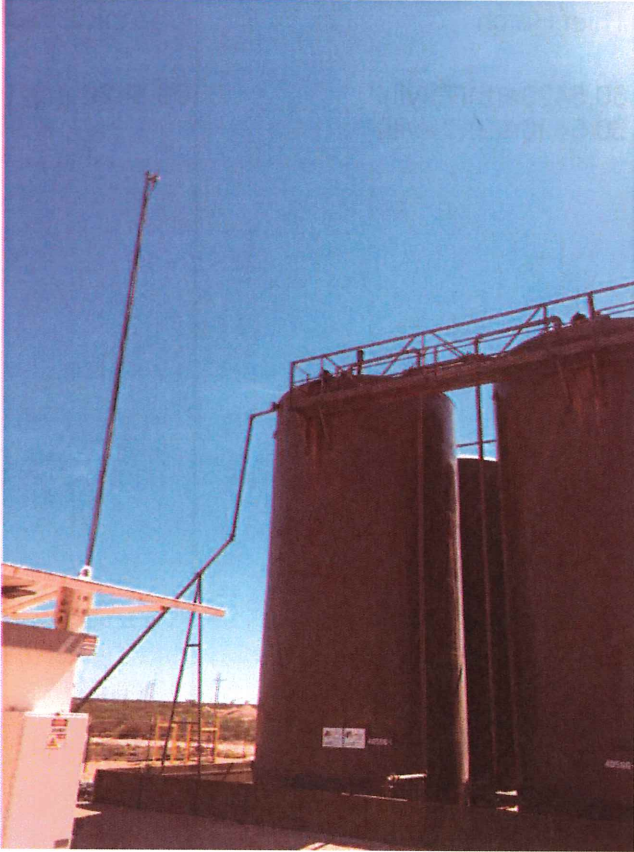
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

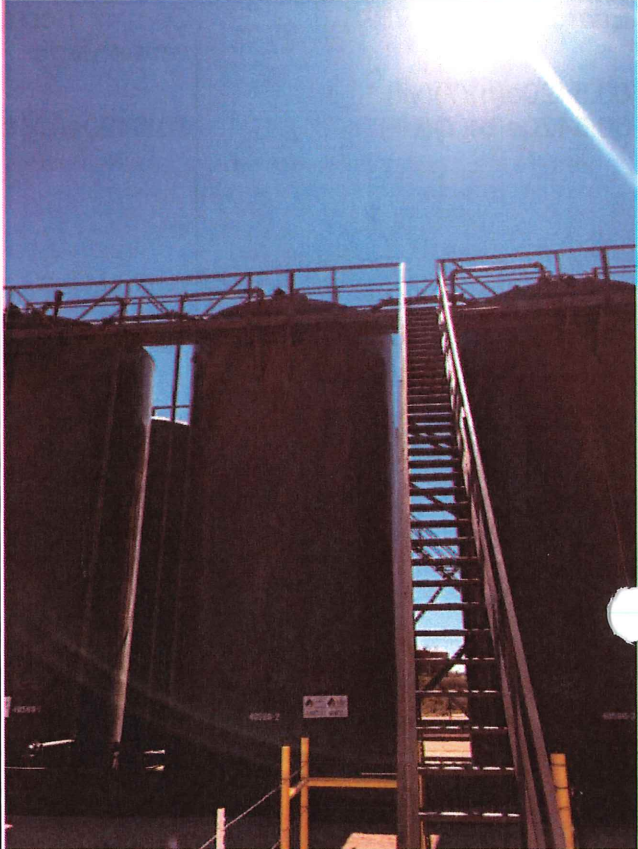


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 common tank vent enardo 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

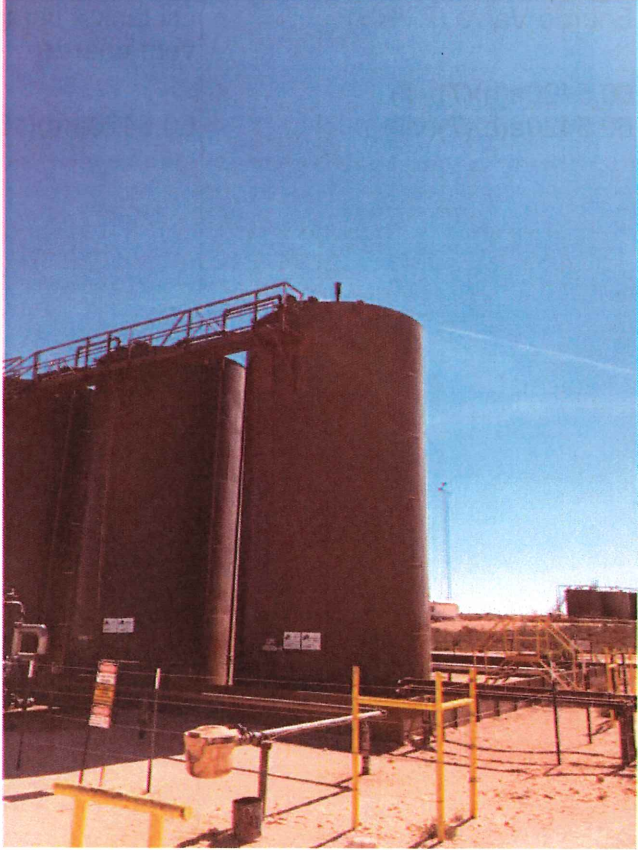


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

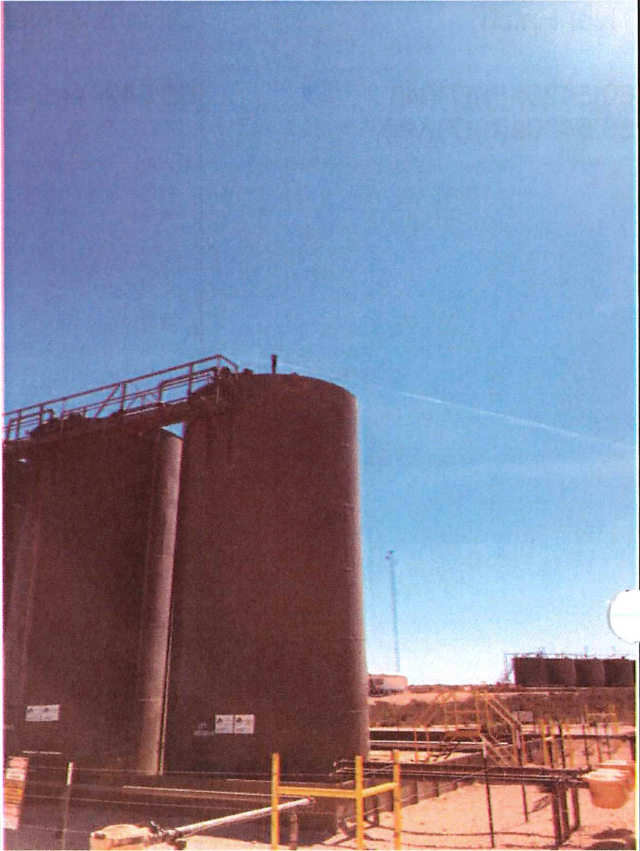


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 common tank vent enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

4

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

82

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

- ☐ Adequate thermal background was not present to observe potential leaks. Resurvey required
- ☐ Could not able to stay within the appropaite viewing distance from equipment. Resurvey required
- ☐ Could not overcome adverse monitoring conditions to observe potential leaks. Resurvey required
- ☒ Interference prevented potential leaks from being observed. Resurvey required
- ☐ Was not able to perform the daily FLIR camera verification. Resurvey required

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

5.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

5.00

60.5420a(c)(15)(ii)(l)(8)

Survey End Time

10:13

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Misty Ivore Ctb (35 Federal 4H Battery)	(b) (6)	02/21/2017	11:08	11:21

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

02/21/2017

60.5420a(b)(7)(i)

Survey Start Time

11:08

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (\geq 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Misty Ivore Ctb (35 Federal 4H Battery)

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

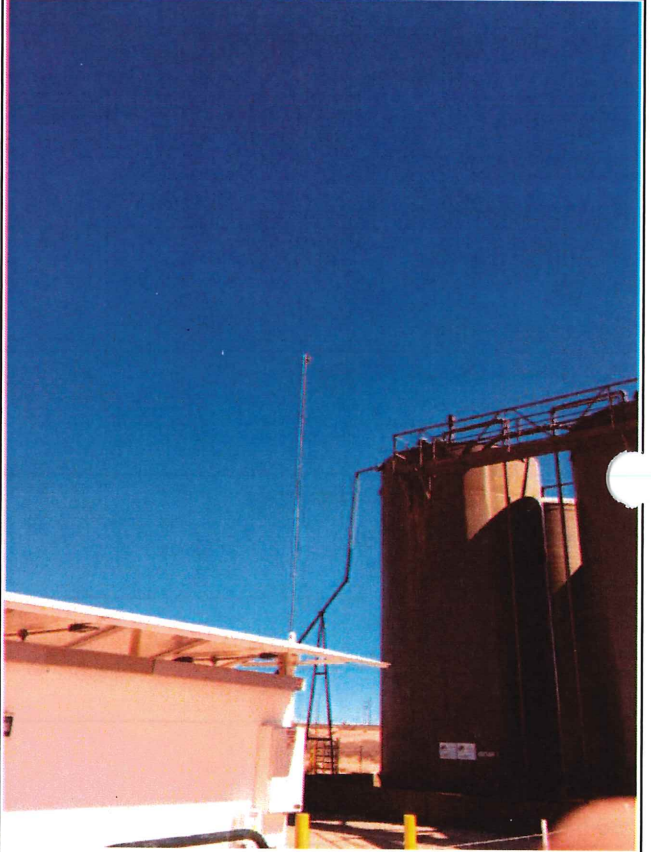
Yes

60.5420a(b)(7)(vii) & (viii)



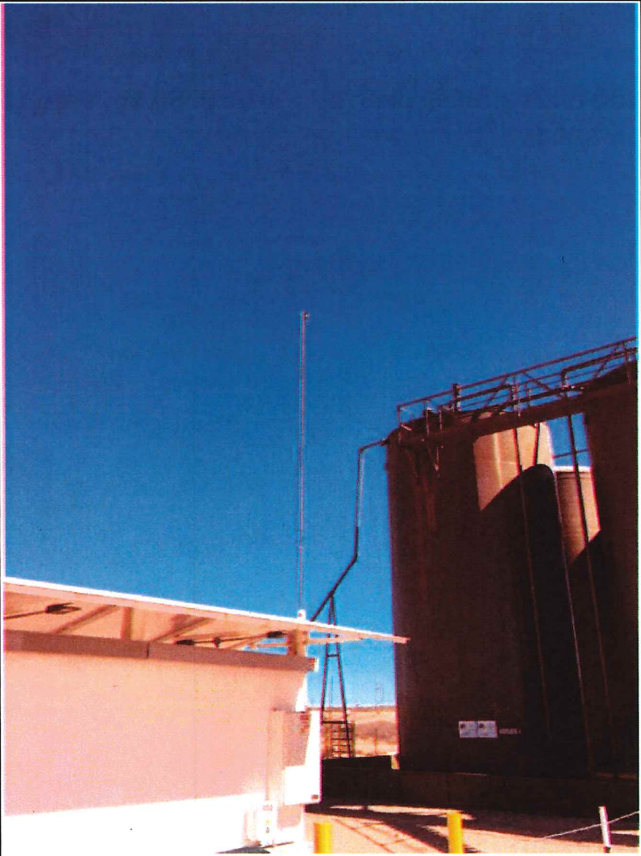
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 common tank vent enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

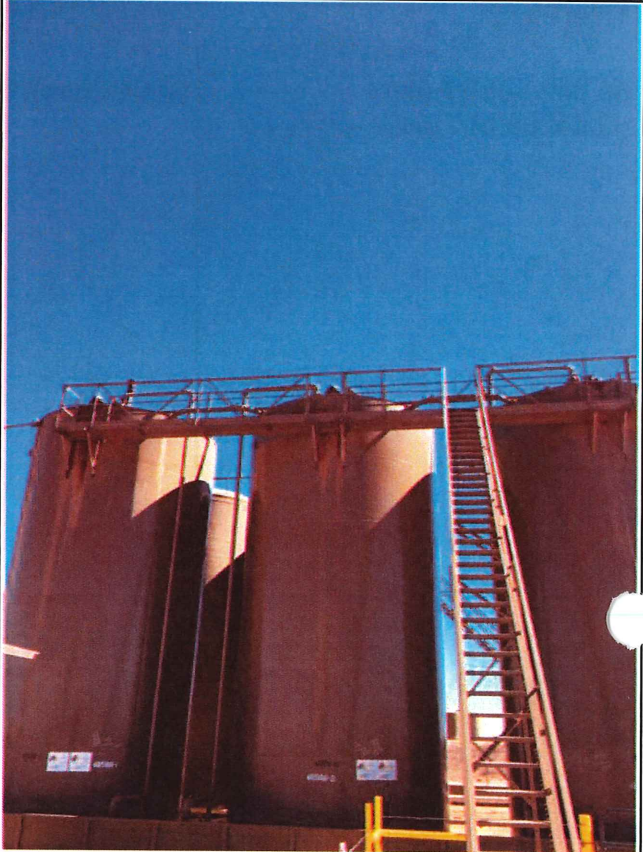


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

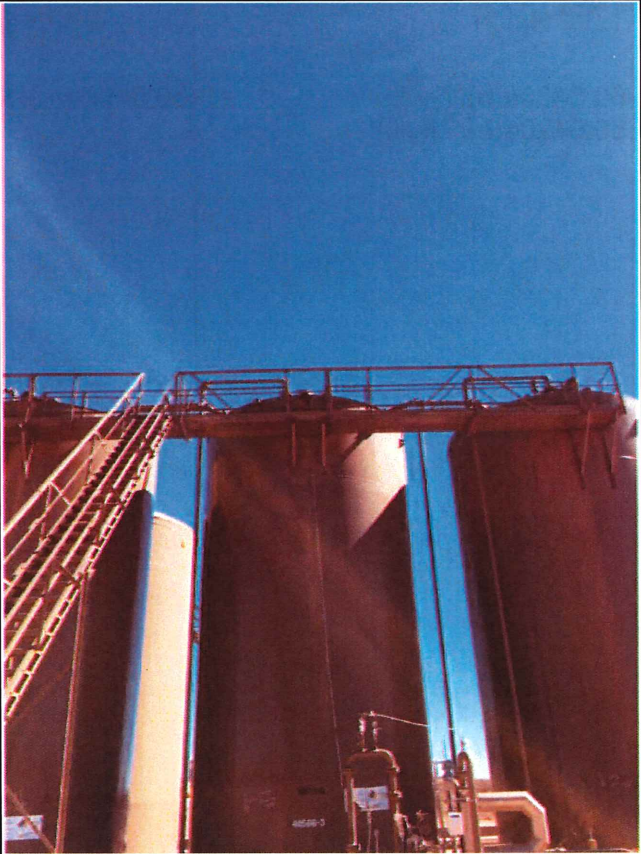


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

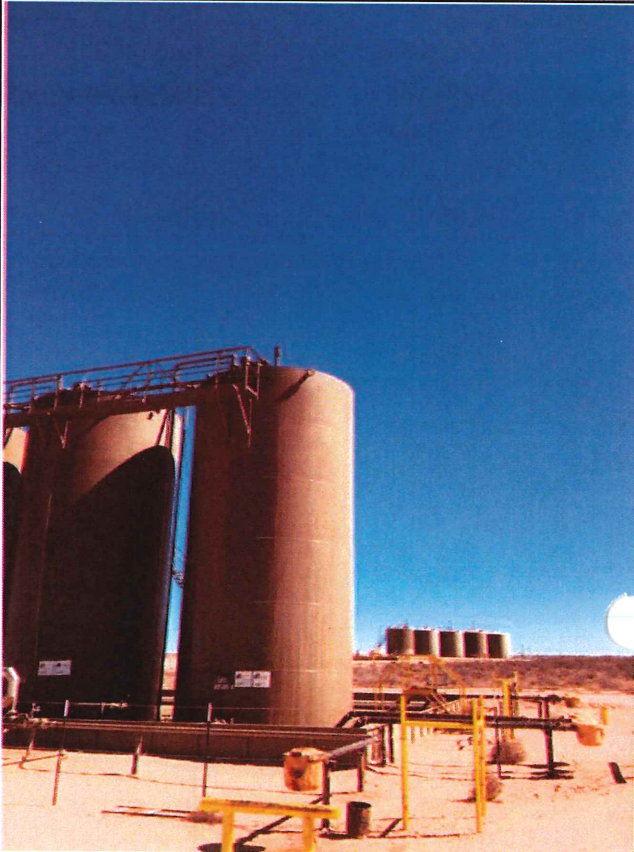


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

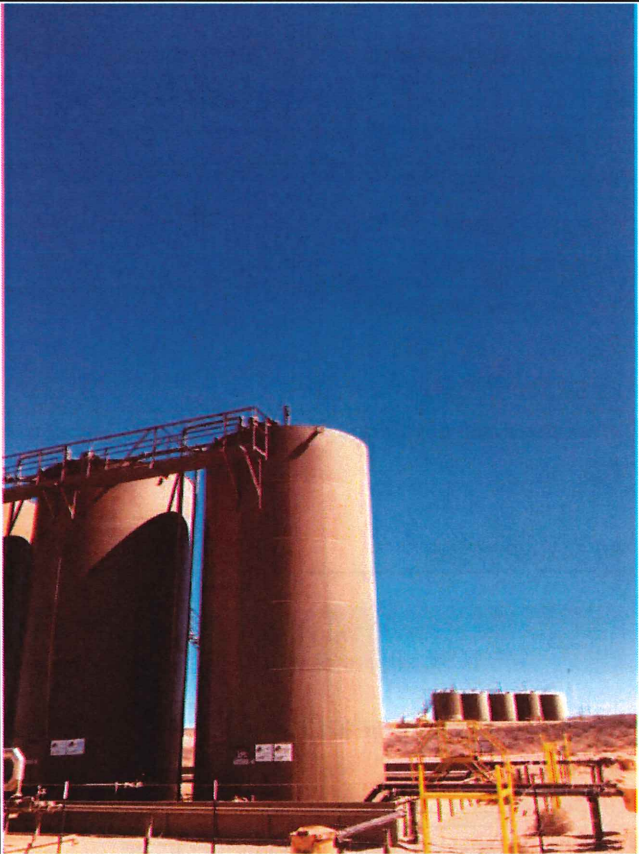


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 common tank vent line enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

6

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

76

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

6.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

6.00

60.5420a(c)(15)(ii)(l)(8)

Survey End Time

11:21

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Patton 18 Federal 1 Ctb Battery	(b) (6)	03/08/2017	11:40	12:03

Facility Information

Is this LDAR survey for NSPS 0000a?

Yes

Date

03/08/2017

60.5420a(b)(7)(i)

Survey Start Time

11:40

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (\geq 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Patton 18 Federal 1 Ctb Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

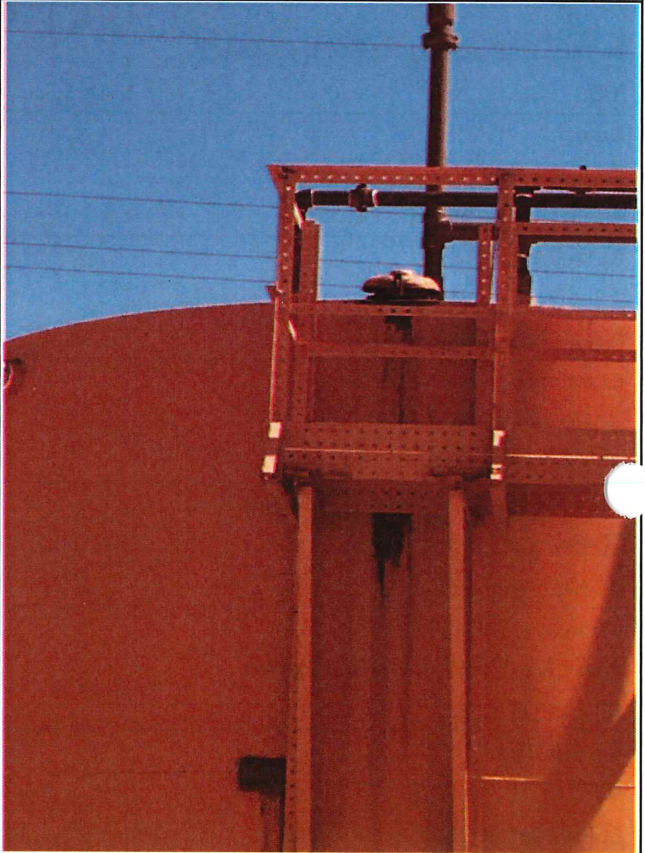
Yes

60.5420a(b)(7)(vii) & (viii)



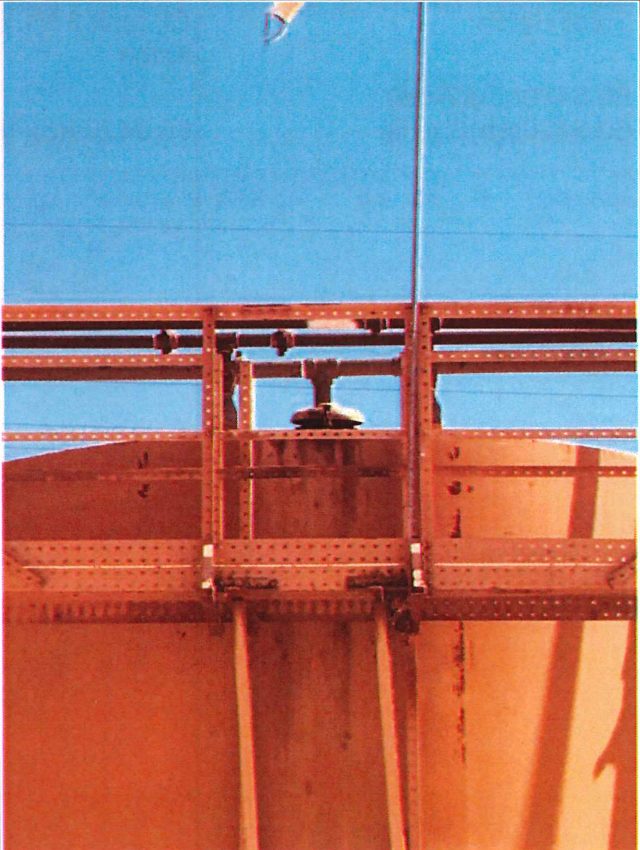
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 MI 278788 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

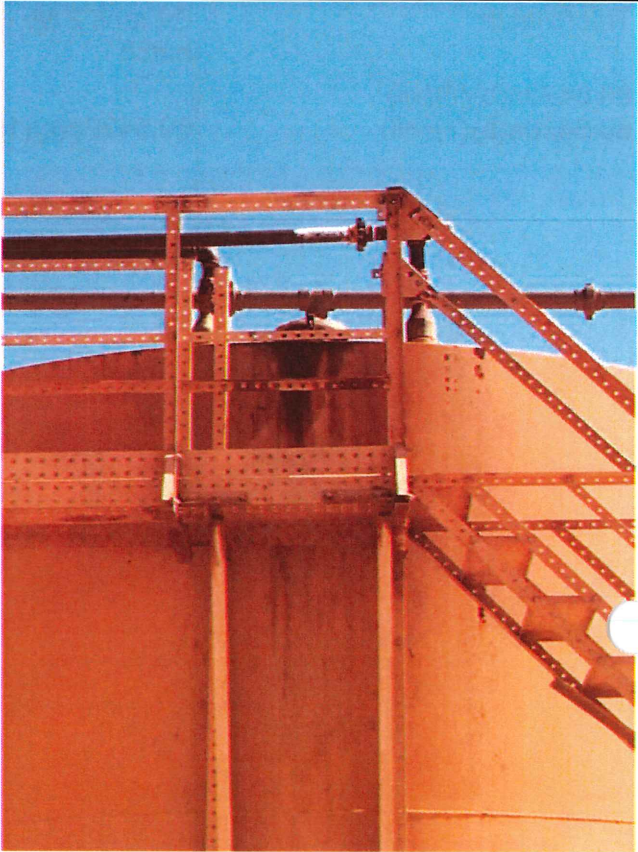


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 MI. Thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 MI. Thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

10

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

75

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

3.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

3.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

12:03

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
PEACHES 19 CTB BATTERY	(b) (6)	03/27/2017	11:59	12:18

Facility Information

Is this LDAR survey for NSPS 0000a?

Yes

Date

03/27/2017

60.5420a(b)(7)(i)

Survey Start Time

11:59

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

PEACHES 19 CTB BATTERY

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

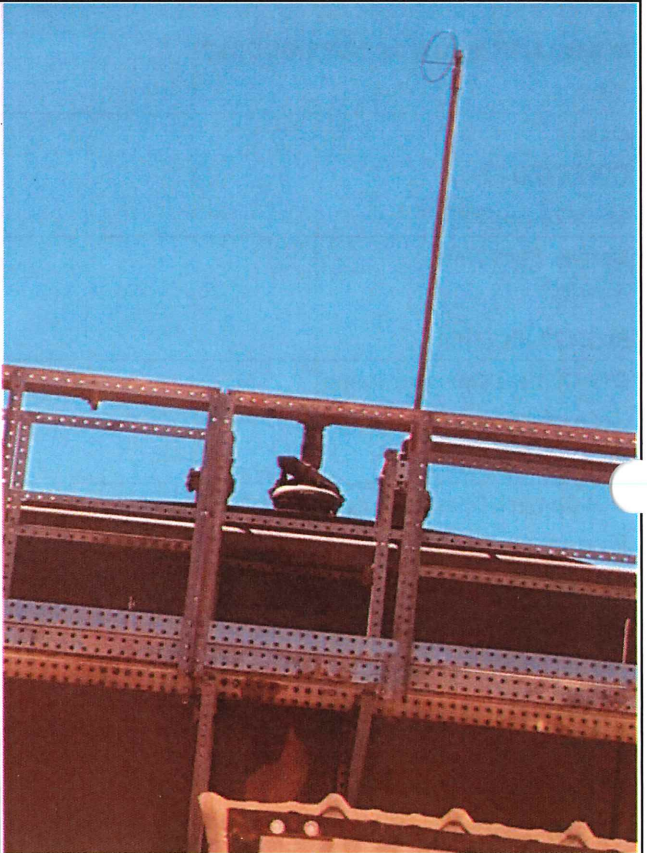
Yes

60.5420a(b)(7)(vii) & (viii)



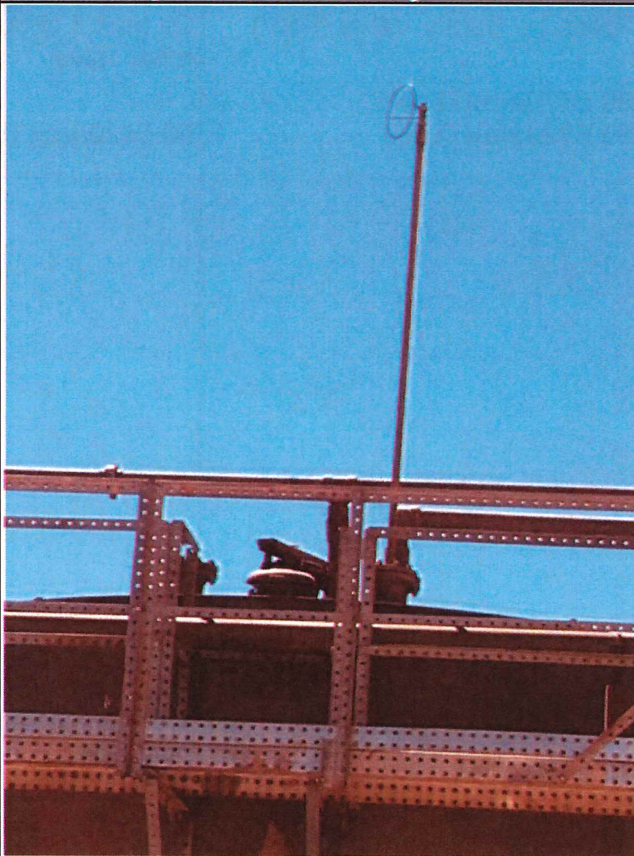
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

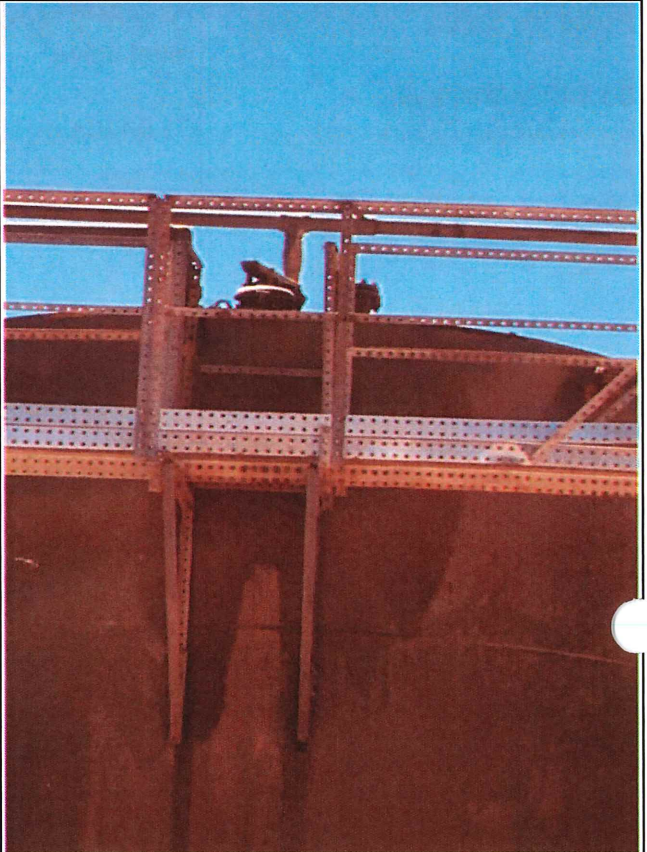


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 tank pressure relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

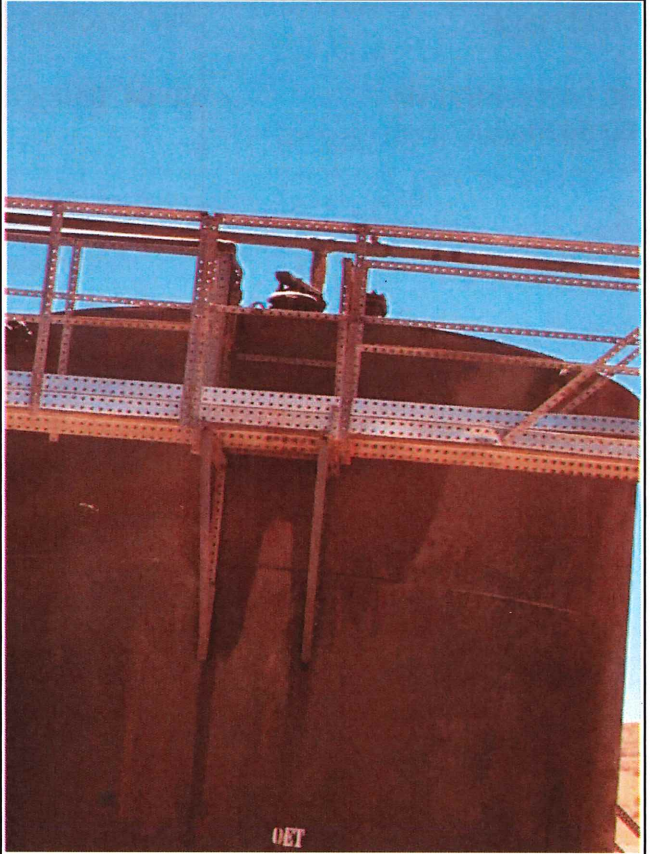


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 tank pressure relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

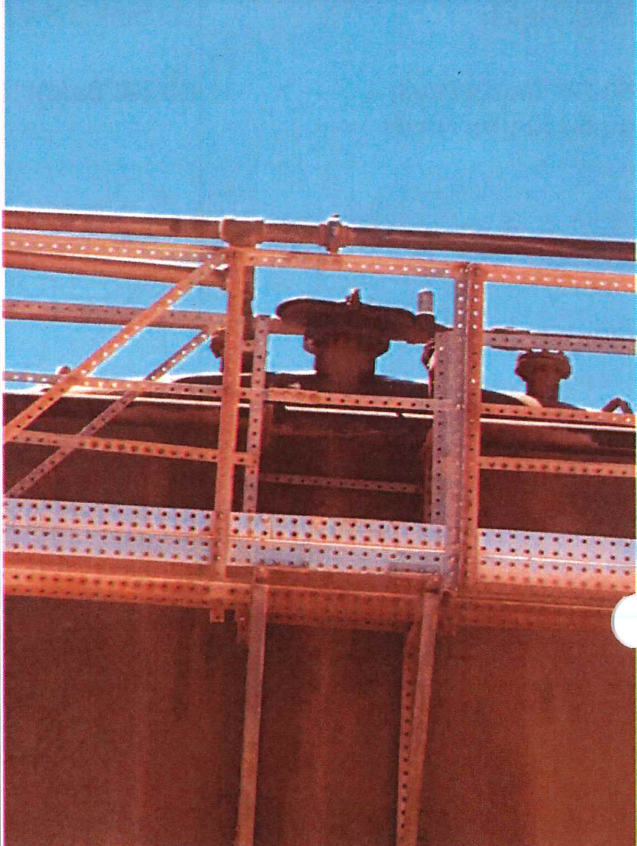


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

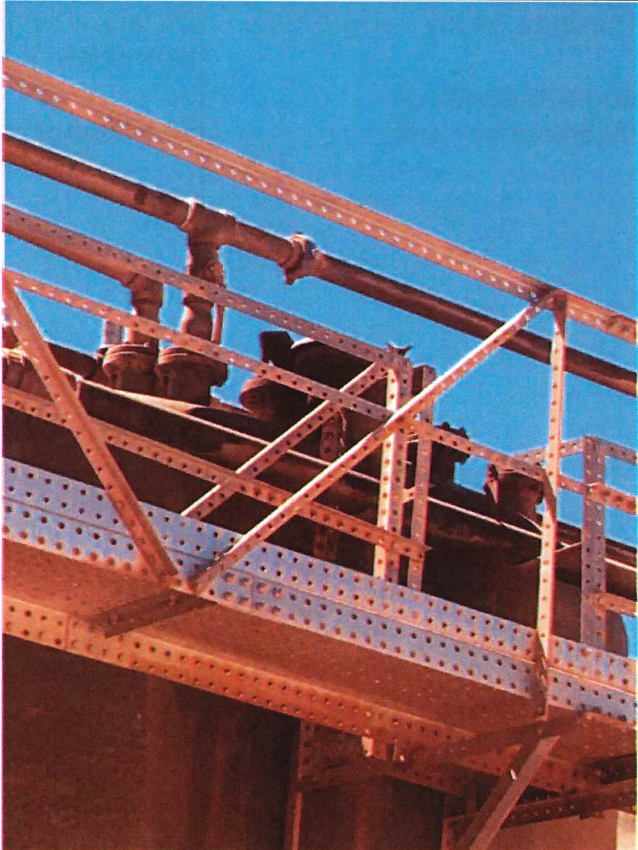


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	PW tank thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

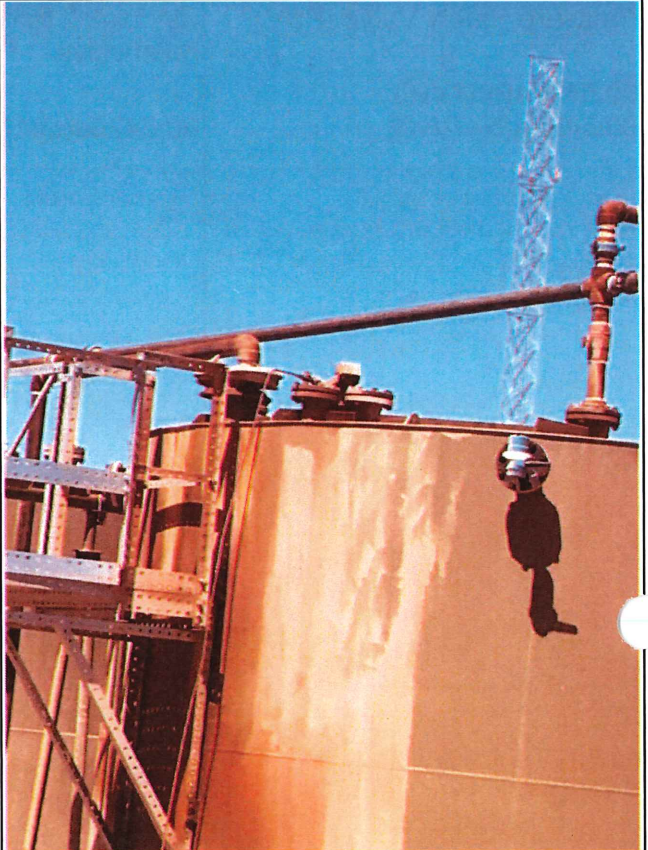


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	PW tank 2 tank safety relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

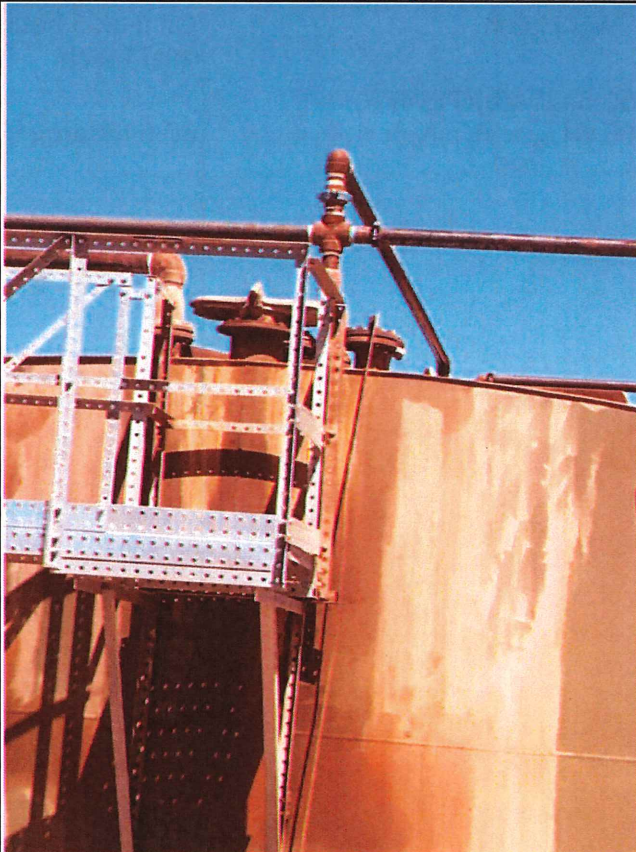


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 behind tank1 tank safety relief valve 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

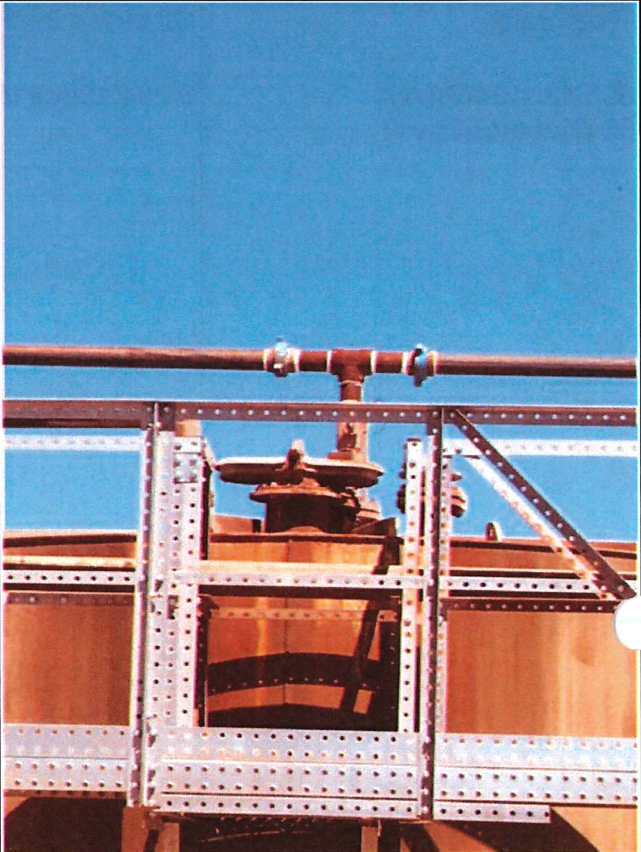


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 4 thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

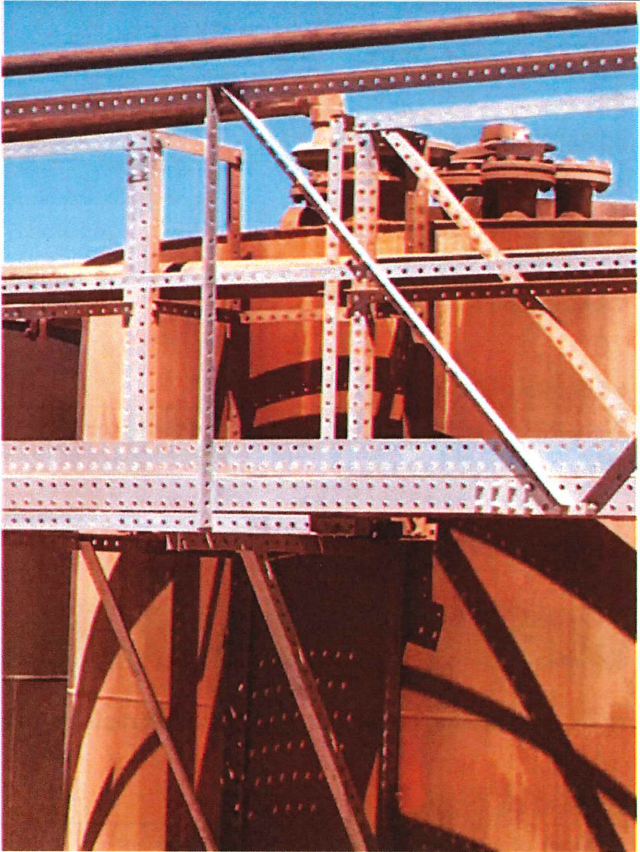


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 5 behind tank 2 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 5 tank pressure relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

11

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

70

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

10.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

10.00

60.5420a(c)(15)(ii)(l)(8)

Survey End Time

12:18

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
PIGLET CENTRAL TANK BATTERY	(b) (6)	04/05/2017	08:56	09:34

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

04/05/2017

60.5420a(b)(7)(i)

Survey Start Time

08:56

60.5420a(b)(7)(ii)

OGI Camera Operator Name

J (b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (\geq 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

PIGLET CENTRAL TANK BATTERY

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

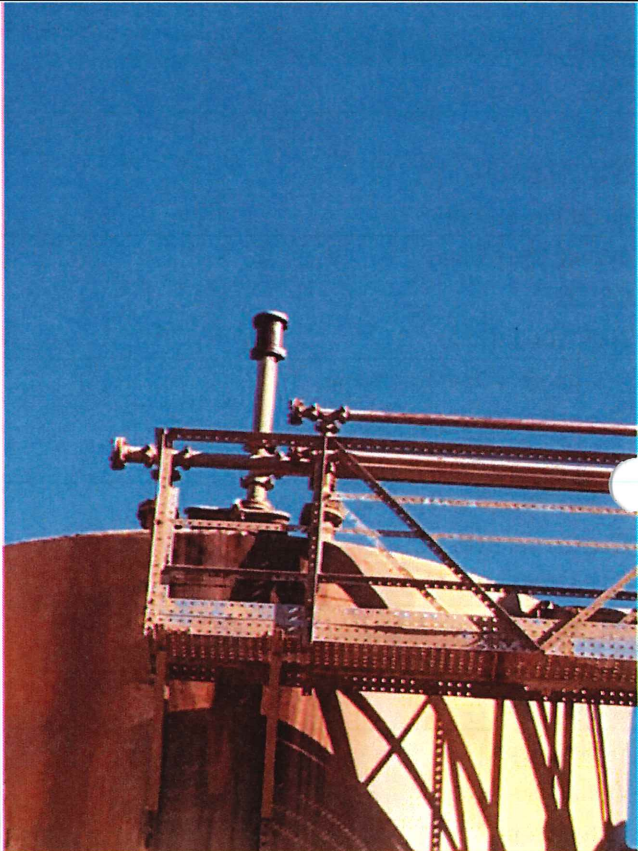
Yes

60.5420a(b)(7)(vii) & (viii)



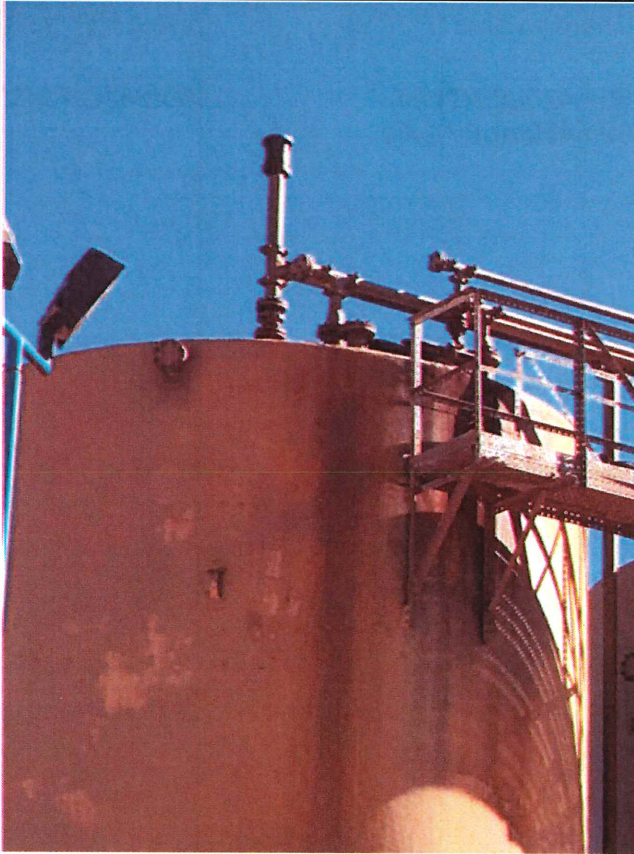
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	West PW tank thief hatch S/N 1001-12 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

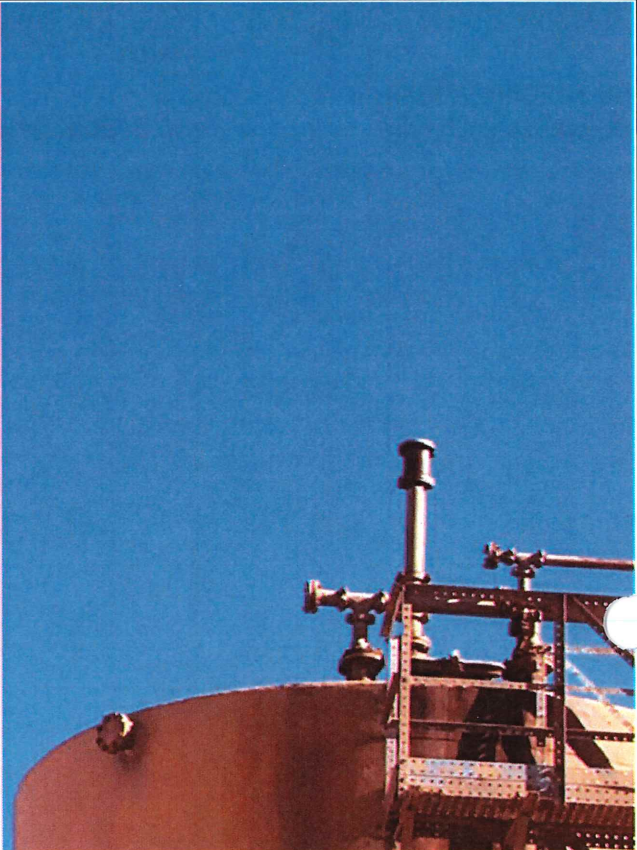


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	West PW tank press relief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

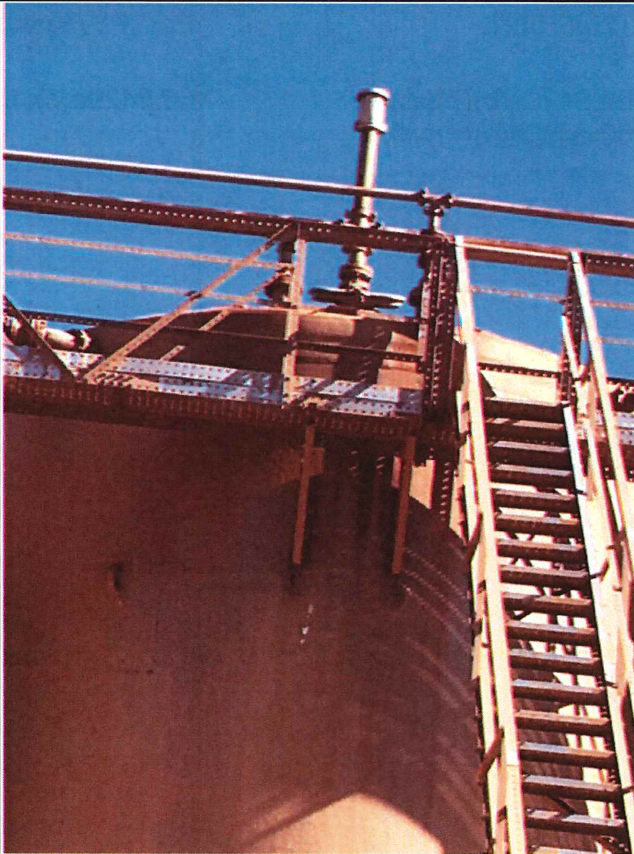


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	West PW tank enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

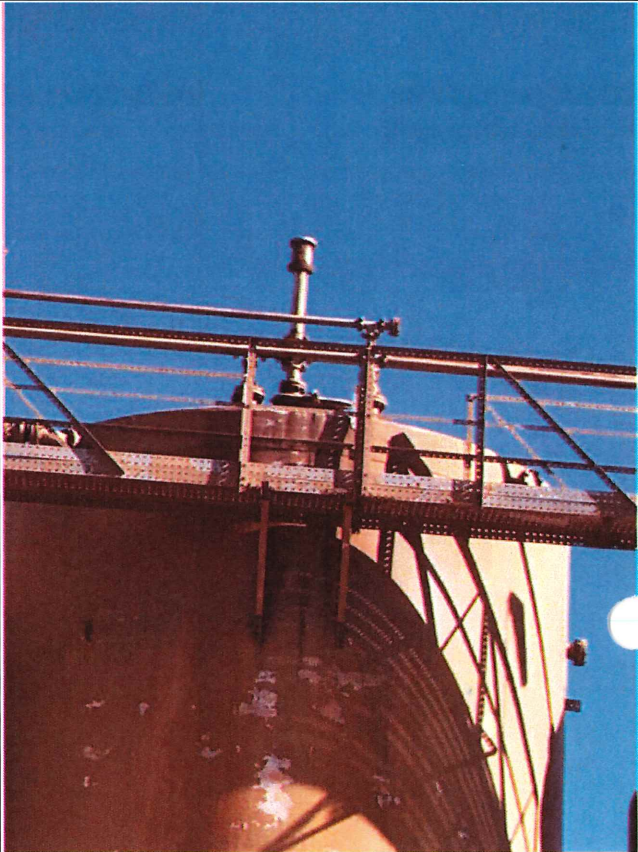


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Middle PW tank thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

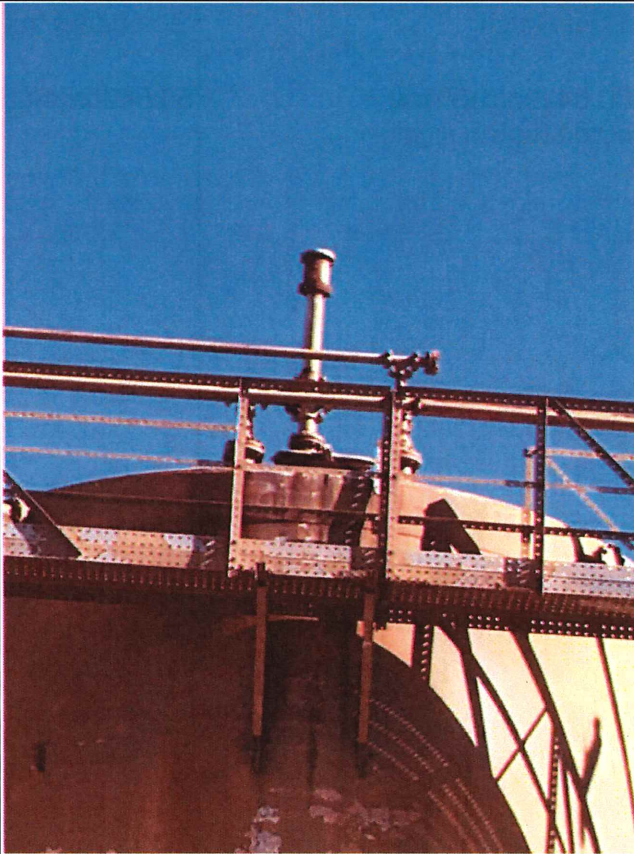


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	East PW tank thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

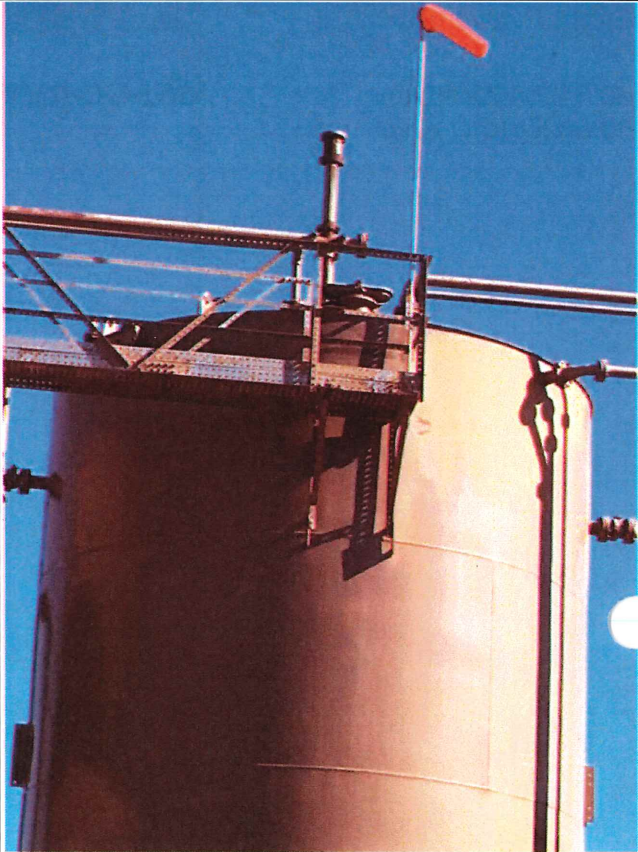


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	East PW tank enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

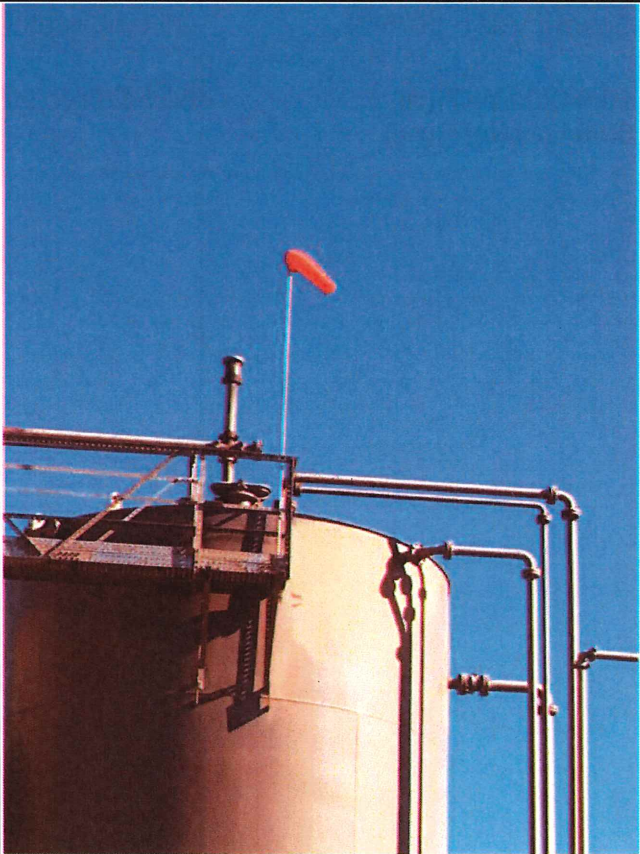


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Gun barrel thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

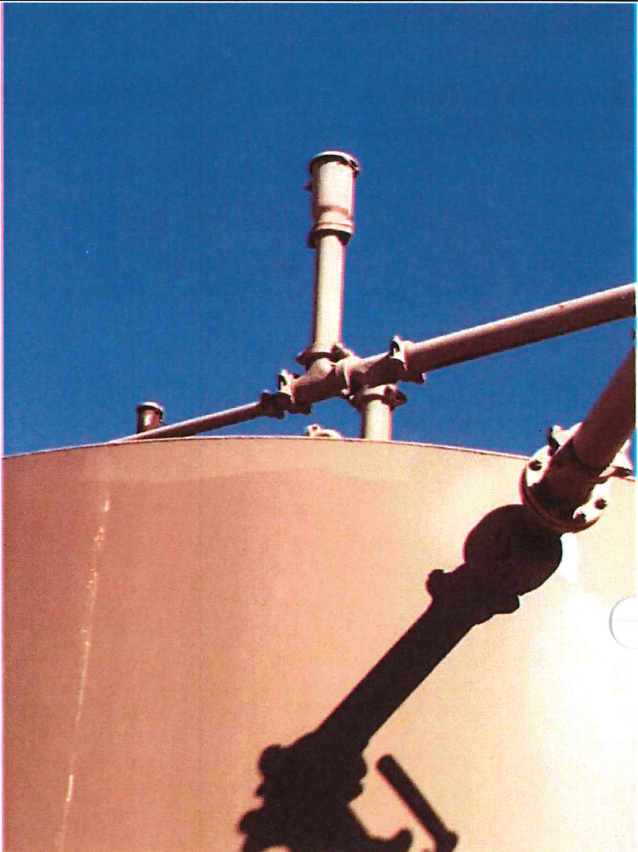


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Gun barrel enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

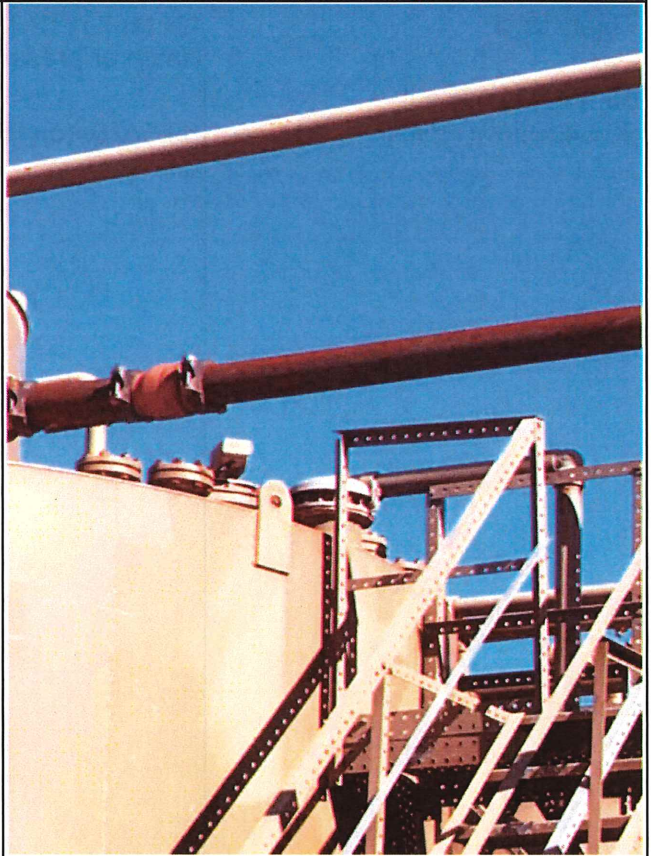


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank southwest enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

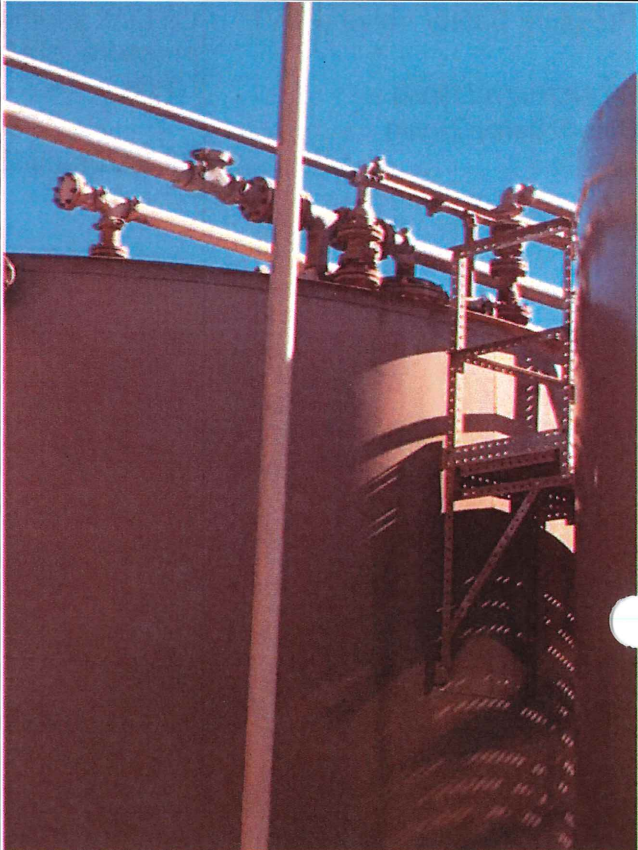


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Pressure Safety Valve (PSV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank southwest pressure relief or thief hatch 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)




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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank northwest thief hatch or pressure relief 60.5420a(c)(15)(ii)(I)(8)	 60.5420a(c)(15)(ii)(I)(8)

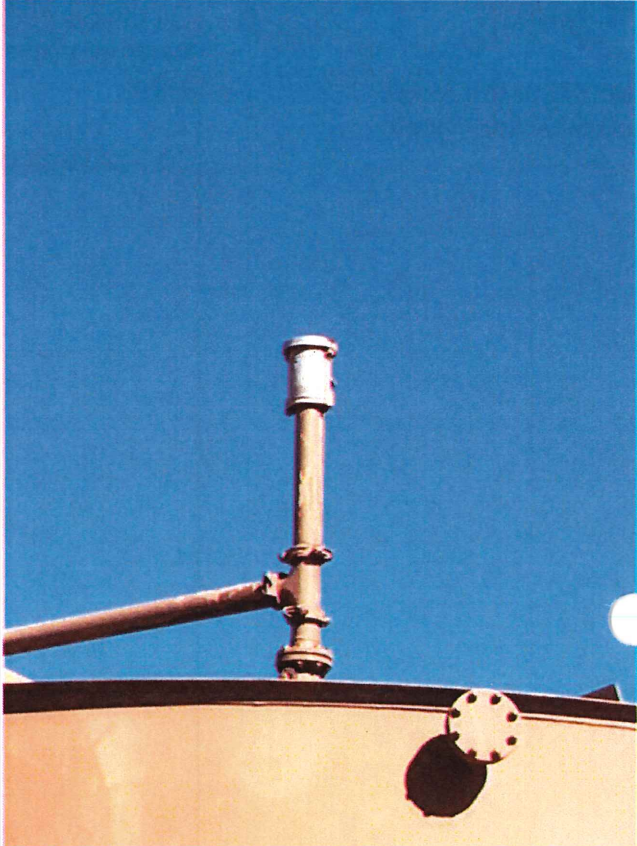


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank north east thief hatch or pressure relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

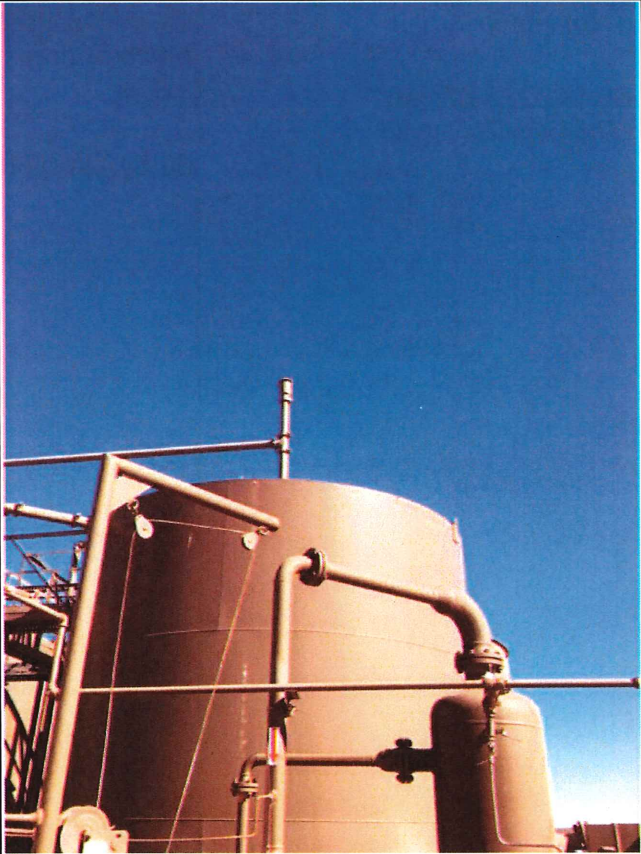


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank north east enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

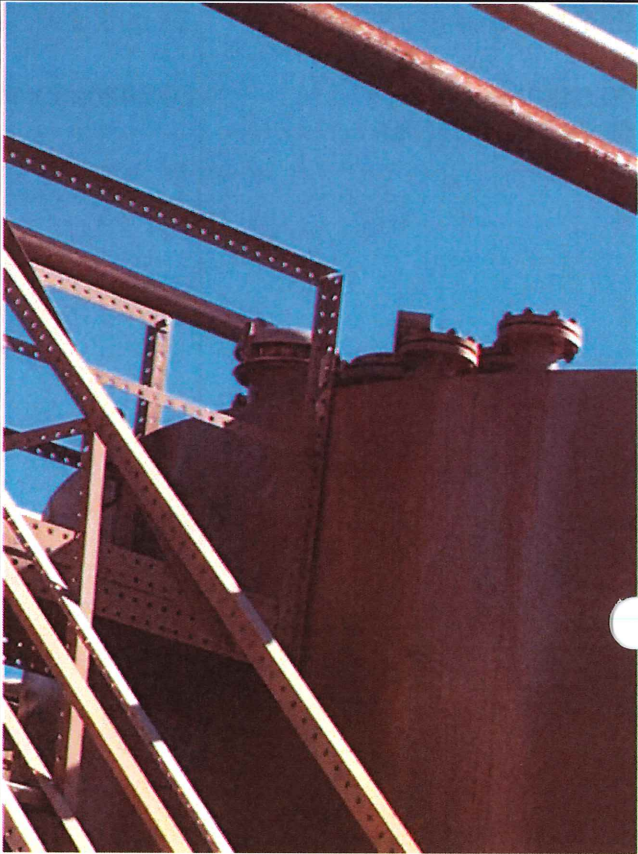


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank southeast enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank southeast thief hatch or pressure relief valve 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

5

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperature (degrees F)

40

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

15.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

15.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

09:34

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Red Bluff CTB Battery	(b) (6)	04/06/2017	10:54	11:19

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

04/06/2017

60.5420a(b)(7)(i)

Survey Start Time

10:54

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Red Bluff CTB Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	60.5420a(c)(15)(ii)(l)(8)	60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

13

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

70

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

60.5420a(c)(15)(ii)(l)(8)

Survey End Time

11:19

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Red Tank 23 Federal 1 Ctb Battery	(b) (6)	04/03/2017	12:15	12:18

Facility Information

Is this LDAR survey for NSPS 0000a?

Yes

Date

04/03/2017

60.5420a(b)(7)(i)

Survey Start Time

12:15

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Red Tank 23 Federal 1 Ctb Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

11

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

79

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

- ☐ Adequate thermal background was not present to observe potential leaks. Resurvey required
- ☐ Could not able to stay within the appropaitte viewing distance from equipment. Resurvey required
- ☐ Could not overcome adverse monitoring conditions to observe potential leaks. Resurvey required
- ☐ Interference prevented potential leaks from being observed. Resurvey required
- ☐ Was not able to perform the daily FLIR camera verification. Resurvey required

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

12:18

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
SMOKEY BITS STATE COM CTB	(b) (6)	07/24/2017	10:19	10:32

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

07/24/2017

60.5420a(b)(7)(i)

Survey Start Time

10:19

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

SMOKEY BITS STATE COM CTB

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

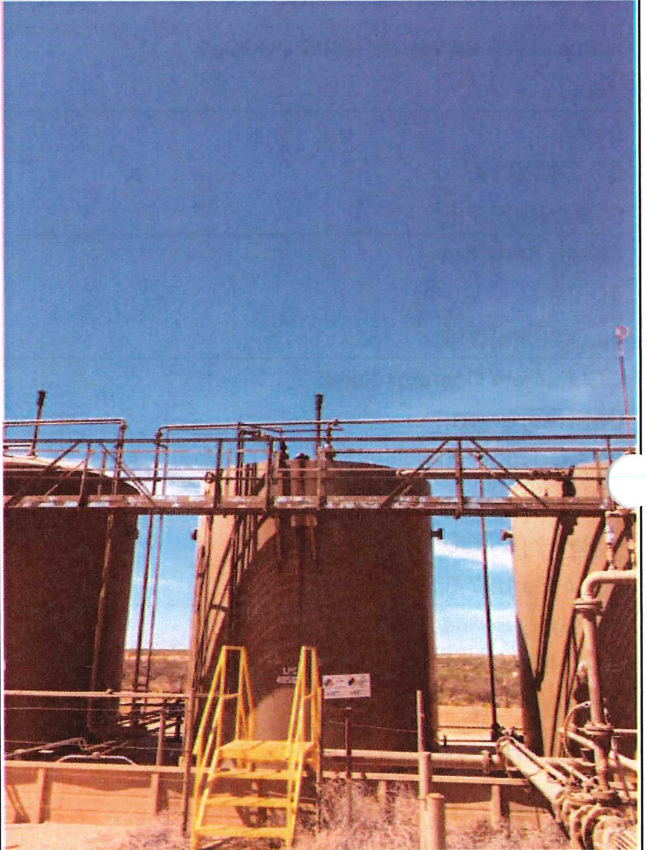
Yes

60.5420a(b)(7)(vii) & (viii)



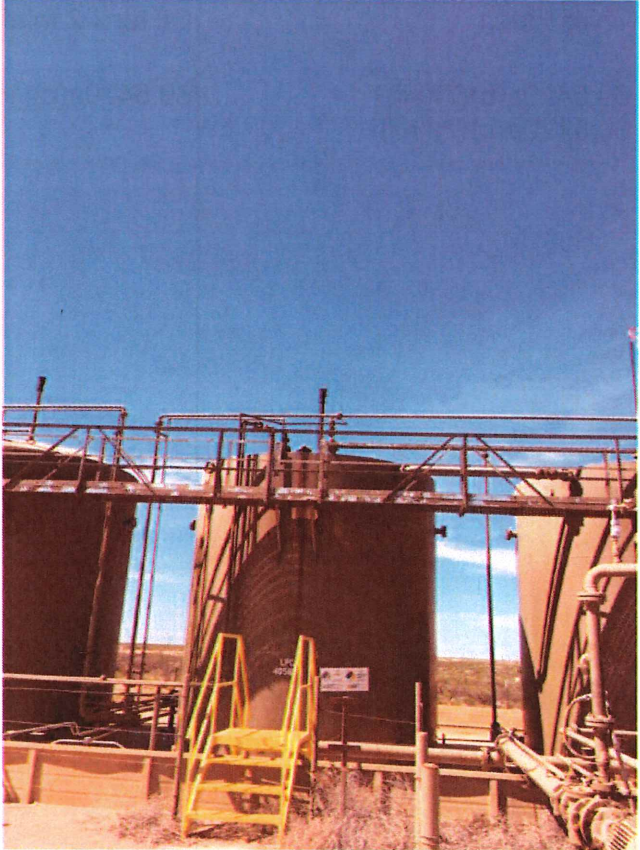
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 <p>60.5420a(c)(15)(ii)(l)(8)</p>

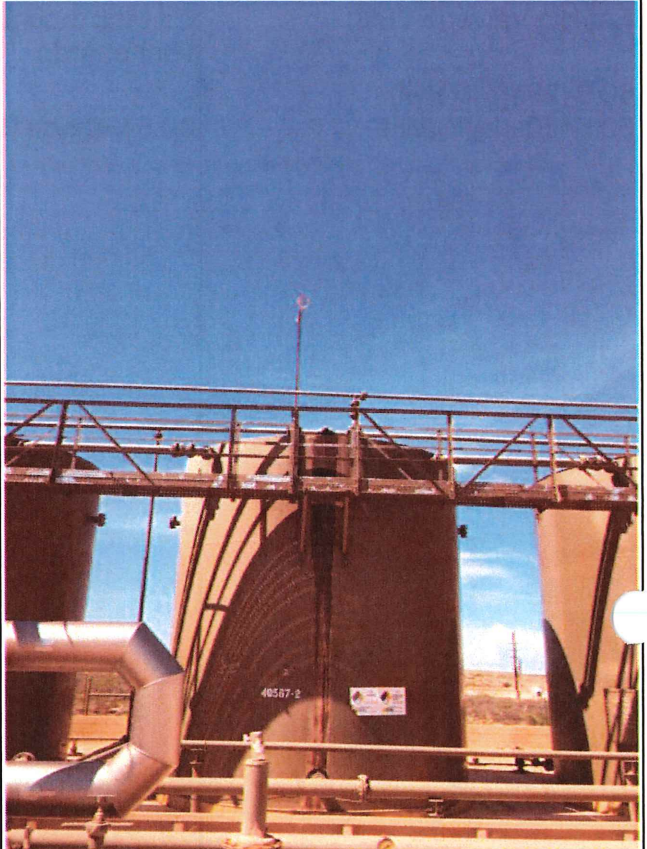


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 common tank vent enardo 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

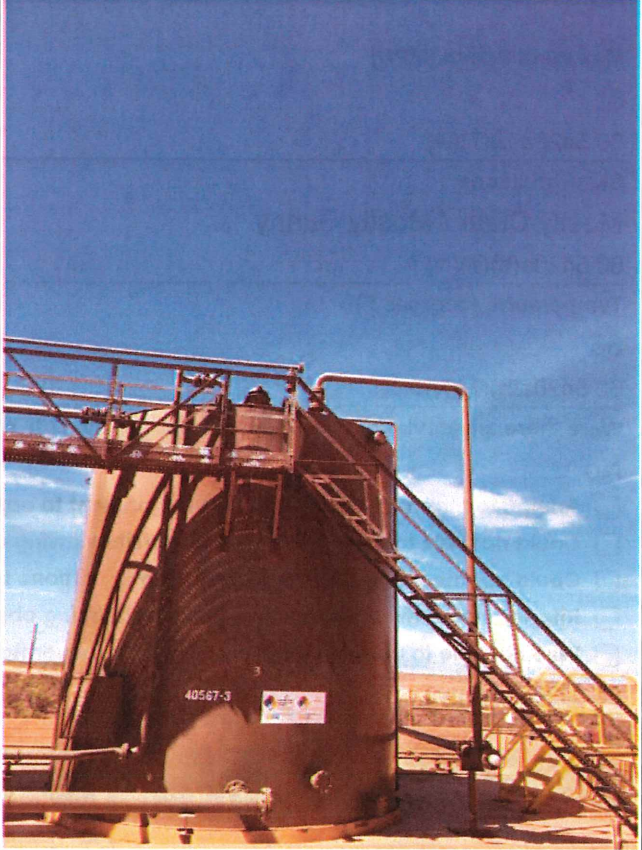


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

5

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

86

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

- ☐ Adequate thermal background was not present to observe potential leaks. Resurvey required
- ☐ Could not able to stay within the appropaite viewing distance from equipment. Resurvey required
- ☐ Could not overcome adverse monitoring conditions to observe potential leaks. Resurvey required
- ☐ Interference prevented potential leaks from being observed. Resurvey required
- ☐ Was not able to perform the daily FLIR camera verification. Resurvey required

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

4.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

4.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

10:32

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Smokey Bits 3H Tank Battery	(b) (6)	02/21/2017	10:01	10:14

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

02/21/2017

60.5420a(b)(7)(i)

Survey Start Time

10:01

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Smokey Bits 3H Tank Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

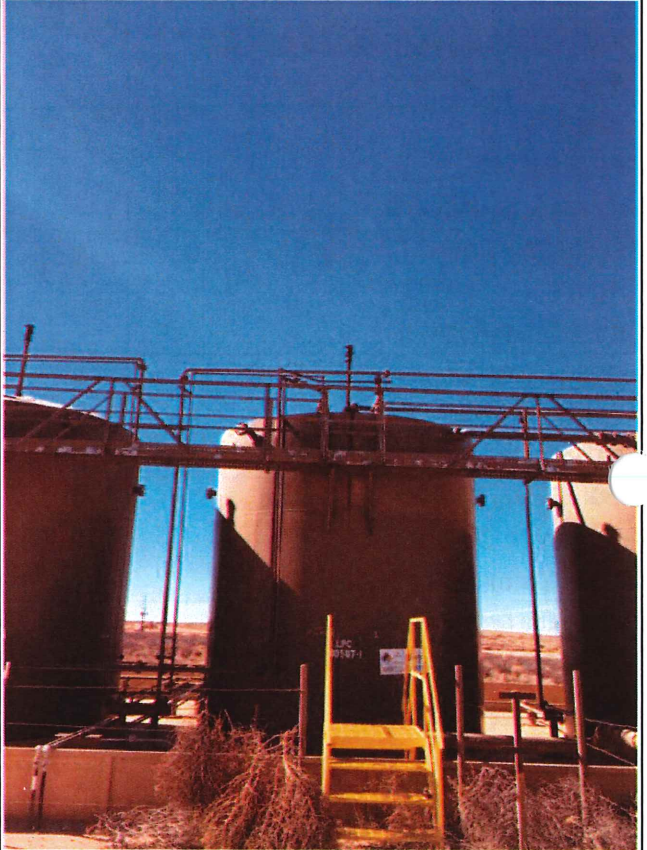
Yes

60.5420a(b)(7)(vii) & (viii)



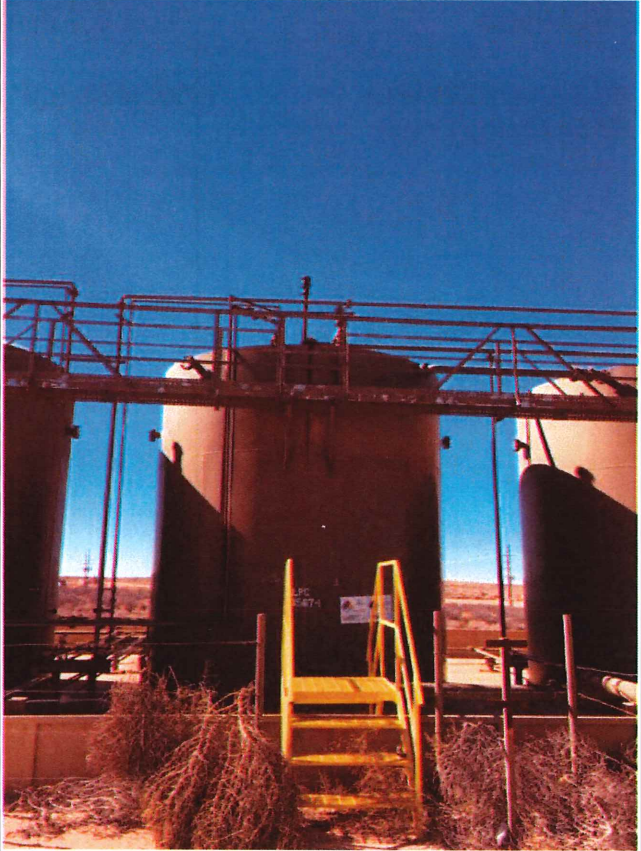
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Leak Identification

Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Enardo Valve (PVRV) 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 common tank vent enardo pic 3710 60.5420a(c)(15)(ii)(l)(8)	 <p>60.5420a(c)(15)(ii)(l)(8)</p>

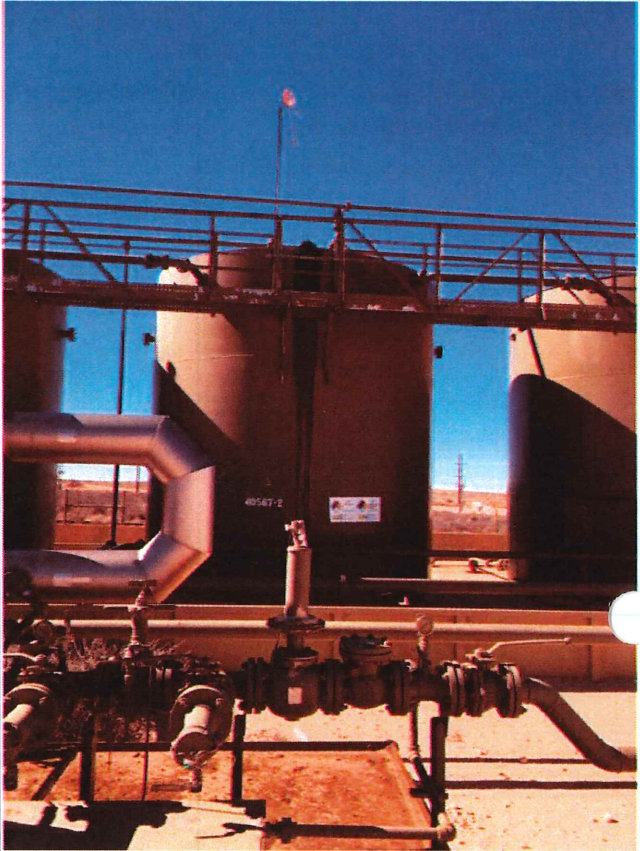


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 1 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)

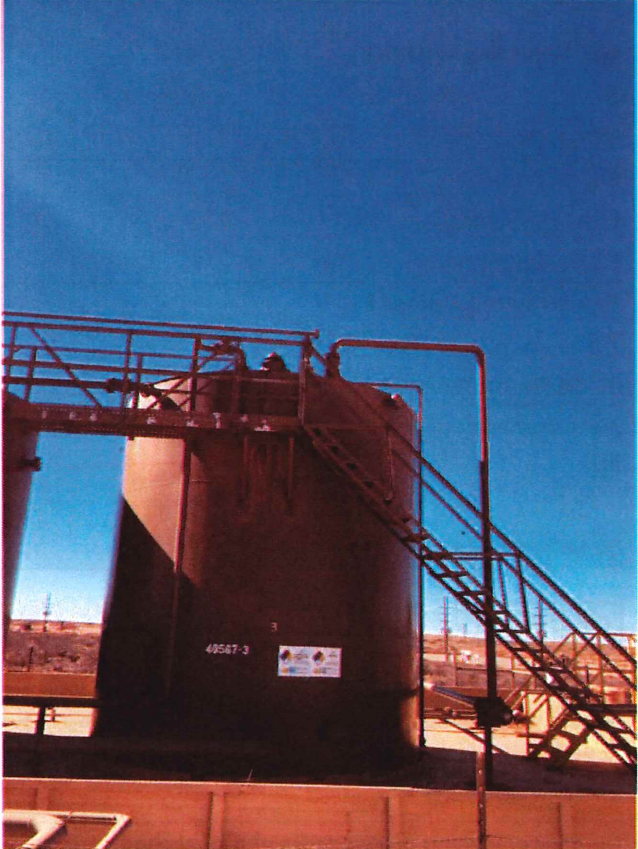


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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 2 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Type of Leaking Component?	Describe Leaking Component Location	Take iPhone photograph of leaking component and identify location.
Thief Hatch 60.5420a(b)(7)(vii) 60.5420a(b)(7)(viii)	Oil tank 3 thief hatch 60.5420a(c)(15)(ii)(l)(8)	 60.5420a(c)(15)(ii)(l)(8)



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Survey Conditions

Max Wind Speed (MPH)

3

60.5420a(b)(7)(iv)

Sky Conditions

Clear / Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

70

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

4.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

4.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

10:14

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
State Dw Battery	(b) (6)	03/13/2017	08:39	08:48

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/13/2017

60.5420a(b)(7)(i)

Survey Start Time

08:39

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

State Dw Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

14

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

47

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

08:48

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Sterling Silver 33 3 Federal Ctb Central Battery	(b) (6)	03/08/2017	11:00	11:15

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/08/2017

60.5420a(b)(7)(i)

Survey Start Time

11:00

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Sterling Silver 33 3 Federal Ctb Central Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components identified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

6

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

79

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

11:15

60.5420a(b)(7)(ii)



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Facility	OGI Camera Operator Name	Date	Survey Start Time	Survey End Time
Sunrise 8 Federal 3 Ctb Battery	(b) (6)	03/08/2017	10:44	10:46

Facility Information

Is this LDAR survey for NSPS OOOOa?

Yes

Date

03/08/2017

60.5420a(b)(7)(i)

Survey Start Time

10:44

60.5420a(b)(7)(ii)

OGI Camera Operator Name

(b) (6)

60.5420a(b)(7)(iii)

OGI Camera Operator Experience

Expert (≥ 300 hours)

60.5420a(b)(7)(iii)

Company Defined Area

New Mexico Delaware Basin

60.5420a(b)(7)

Facility Type

Well Site

60.5420a(b)(7)

Facility

Sunrise 8 Federal 3 Ctb Battery

60.5420a(b)(7)

Picture of site from FLIR camera with GPS coordinates was taken?

Yes

60.5420a(c)(15)(ii)(E)

Model of OGI Camera

FLIR GF320

60.5420a(b)(7)(v)

Were any leaking components indentified in the survey and not repaired?

No

60.5420a(b)(7)(vii) & (viii)



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Leak Identification



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Survey Conditions

Max Wind Speed (MPH)

7

60.5420a(b)(7)(iv)

Sky Conditions

Mostly Clear / Mostly Sunny

60.5420a(b)(7)(iv)

Temperautre (degrees F)

77

60.5420a(b)(7)(iv)

Were there any deviations from the monitoring plan? If Yes check all deviations that apply.

No

60.5420a(b)(7)(vi)

Submission

Number of leaking components not repaired during survey

0.00

60.5420a(b)(7)(vii) & (viii)

Number of leaking components photographed

0.00

60.5420a(c)(15)(ii)(I)(8)

Survey End Time

10:46

60.5420a(b)(7)(ii)